



GUP Air Service Market Evaluation January 17, 2022



RRC
A S S O C I A T E S





Contents

- Purpose & Background
- Executive Summary
- Data Sources
- GUP Catchment Area Profile
- GUP Area Flight Demand
- GUP Route Analyses
- GUP Economic Impact
- Appendix: GUP Employer Survey Results
- Appendix: Additional GUP Resident Demand Measures
- Appendix: Additional GUP Visitor Demand Measures
- Appendix: US Flight Routes Served by 1-9 Seat Planes

Purpose & Background

- **Study purpose:** Assess market potential for commercial air service to Gallup Municipal Airport (GUP)
 - **Market analysis:** Define GUP catchment area and measure existing and potential air travel demand to/from the area, including origins/local airports used, destinations, passenger volumes, airfares, market characteristics (e.g. population, jobs, income, GDP), etc.
 - **Route analysis:** Evaluate flight routes that would be financially viable based on projected traffic volumes, airfares, service patterns, seasons, etc.
 - **Economic impact:** Characterize potential economic impacts to GUP catchment area (per employer feedback).
- **Background:** City of Gallup and GGEDC are pursuing an NMDOT grant (*funded by New Mexico Rural Air Service Enhancement Act*) in support of air service at GUP.
 - Rural Air Service Enhancement Act funds are limited to supporting **new air service** with aircraft that have a **passenger capacity of 9 seats or less**
 - **Likely characteristics of any future GUP commercial flight service in the short- to medium-term:**
 - Flights would likely be provided by a **small carrier** (e.g. Boutique Air, Advanced Air, etc.)
 - Checked **baggage service would be available** at GUP
 - TSA screening would **not** take place at GUP
 - **Connecting flight service would be available** (in PHX, DEN, etc.), but may require purchasing separate tickets, re-checking bags and passing through TSA screening at the connecting airports
 - **Airfares TBD** (likely to be what the market can bear)

GUP Catchment Area | Executive Summary

- GUP catchment area includes significant portions of **McKinley, Apache and Cibola counties**.
- Total catchment area **population is approximately 128,000**.
- Aggregate **household income is approximately \$1.7 billion**.
- Catchment-area residents took about 17,500 round-trip flights in 2019 (or **50 Passengers Daily Each Way - PDEW**)
- Most flights currently taken by **McKinley and Cibola County** residents depart from **ABQ** (89%).
- Flights taken by **Apache County** residents are primarily **split between ABQ and PHX** (47-45% each).

GUP Flight Demand | Executive Summary

- **Current actual flight volume** to/from the GUP catchment area is estimated at approximately 35,000 round-trip flights per year (**95 PDEW**), inclusive of residents and visitors.
- **“Potential” (realized + latent) GUP-area flight demand**, which would be predicted by socioeconomic measures, is estimated at a higher 95,000 round-trip flights in 2019 (**260 PDEW**).
 - This represents flight volume that might be realized over time if flight service was available and attractive.
- The **average** of realized and potential demand – a **midpoint for estimating potential GUP demand** – is approximately 65,000 annual round-trips flights (**180 PDEW**), split 50/50 between residents and visitors.
 - The addition of GUP air service may help convert some latent demand to actualized demand.
- In the **midpoint scenario**, **leading GUP markets** are the Los Angeles basin (10.8 PDEW), the Bay Area (9.8 PDEW), and Dallas/Ft Worth (8.8 PDEW).

GUP Route Analysis | Executive Summary

- Four potential airports for GUP air service have been evaluated: **Denver (DEN), Dallas/Ft Worth (DFW), Phoenix (PHX), and Los Angeles (LAX).**
- **Destination demand** (*i.e. travel to/from the destination only, connecting passengers excluded*) is generally **insufficient** or borderline to support 2x/day service from GUP.
- A **combination of destination and connecting demand** would be needed to support GUP service to most target airports.
- **DFW and LAX**, while attractive from economic development and demand standpoints, are **too distant and thus too expensive** to be realistic candidates for air service at the present time.
- Thus, **PHX and DEN appear to be the most viable targets** for GUP air service.
 - Both have a history of GUP air service, with PHX producing higher passenger volumes
 - Both are currently among the leading flight destinations for GUP-area businesses
 - Both are about equally likely to be used by GUP-area businesses (per survey), if flight service were offered
 - Businesses are more likely to prefer PHX over DEN as their first choice for air service

Additional Findings and Observations | Executive Summary

- Past GUP air performance suggests that **flight frequency** (e.g. 2x/day or more) and **codeshare agreements** can spur demand.
- Most employer survey respondents expect their **air travel would increase** significantly (31%) or increase slightly (28%) if GUP air service were available.
- Most employer survey respondents believe the **economic impact** of GUP air service **to their business** would be very positive (37%) or somewhat positive (29%).
- A large majority of employer survey respondents believe the impact of GUP air service on the **Gallup economy** would be very (58%) or somewhat (37%) positive.

Data Sources

Data Sources

- **Air travel itineraries (from Airlines Report Corporation) – used for quantifying local resident flight demand and identifying local resident travel destinations**
 - Data is based on 6,449 airline tickets purchased via online & brick and mortar travel agencies by residents of the GUP catchment area, for travel occurring in January 2016 – September 2021, and originating from airports in the region (ABQ-Albuquerque, PHX-Phoenix, FLG-Flagstaff, etc.). Source: Airlines Reporting Corporation – ARC.
 - The data reflect a representative sample of airline tickets purchased with a consumer form of payment through an ARC-accredited agency - including major online travel agencies (OTAs) such as Expedia, Orbitz, and Travelocity. A substantial majority of the data is associated with OTA ticket sales.
 - Because the ARC data represent consumer purchases of airline tickets, there is a natural bias toward leisure and unmanaged business travel behavior. The data do not reflect airline tickets purchased with corporate forms of payment, as point-of-sale information for those purchases is only available at the agency level - not the consumer/purchaser level.
 - ARC estimates that across all markets, the purchaser point-of-sale data represents slightly less than 10% of total U.S. domestic passenger volume. This amount can vary significantly by individual geographic market depending on several factors, including but not limited to the following:
 - The overall composition of air travelers (leisure vs. business)
 - The presence of carriers whose distribution is more heavily weighted toward the direct vs. agency channel (e.g., Low cost carriers)
 - The presence of carriers with limited or no participation in the ARC settlement system (e.g. Southwest, Spirit, Frontier, Allegiant, Volaris)

Data Sources (continued)

- **Mobile device data (Envionics) – used for quantifying GUP-area flight demand and GUP-area flier demographics at ABQ**
 - Underlying dataset encompasses 40,600 unique devices identified within the sterile part of ABQ terminal in October 2020 – September 2021, and 51,800 devices identified in ABQ in October 2019 – September 2020. Source: Envionics Analytics.
 - Devices are anonymized / not personally identifiable, and device detection is permission-based (e.g., via cellphone apps).
 - For each unique device, the dataset tracks the number of times the device entered the terminal area, including a count of visits per month, day of week, and time of day. This allows us to determine repeat visit patterns by travelers, and screen out devices that most likely belong to airport employees.
 - Devices tracked 51 or more times per year at ABQ are excluded (assumed to be employees).
 - The “common evening location” of each device is used to infer the device owner’s place of residence. This is useful for telling us how many ABQ travelers live in the GUP catchment area, allowing us to quantify flight demand from the GUP catchment area that is realized at ABQ.
 - The home location is also used to assign a Claritas PRIZM® Premier Segment to each device owner.
 - PRIZM® Premier classifies every U.S. household into one of 68 consumer segments based on geo-demographic data. For easier analysis, the 68 segments can be aggregated into various demographic, social and life stage groups.
 - The PRIZM data thus allows for inferences of the demographic profile of GUP catchment area fliers at ABQ.

Data Sources (continued)

- **Mobile device data (SafeGraph) – used for cross-checking GUP area flier counts at ABQ**
 - Provides a cross-check to Environics mobility geographic origin data.
 - Similar to Environics, data was purchased regarding the place of residence of persons identified as being in the ABQ area in December 2020 – February 2021. (Caution: the ABQ location was defined by SafeGraph to include the neighborhood around the ABQ terminal, and thus could include non-fliers.)
 - Data reflects approximately 5500 unique individuals identified as being in the ABQ area in December 2020, 4900 in January 2021, and 4800 in February 2021.
- **GUP-area household spend on airfare (estimated by ESRI) – used for estimating flight demand by GUP-area residents**
 - Airfare spend estimates are based on 2018 and 2019 US Consumer Expenditure Surveys, Bureau of Labor Statistics.
 - Estimates includes a “spending potential index”, which represents the amount spent on airfare relative to the national average.
- **Other secondary data – used for estimating/calibrating estimates inbound and outbound flight demand, destinations, fares, market characteristics, etc.**
 - US DOT airport schedule, enplanement and origin/destination data
 - Population, economic, and travel statistical data for the GUP and ABQ catchment areas from government and private data sources
 - Local/regional studies (sponsored by Gallup EDC, NM Department of Tourism, AZ Department of Tourism, Navajo Nation, etc.)

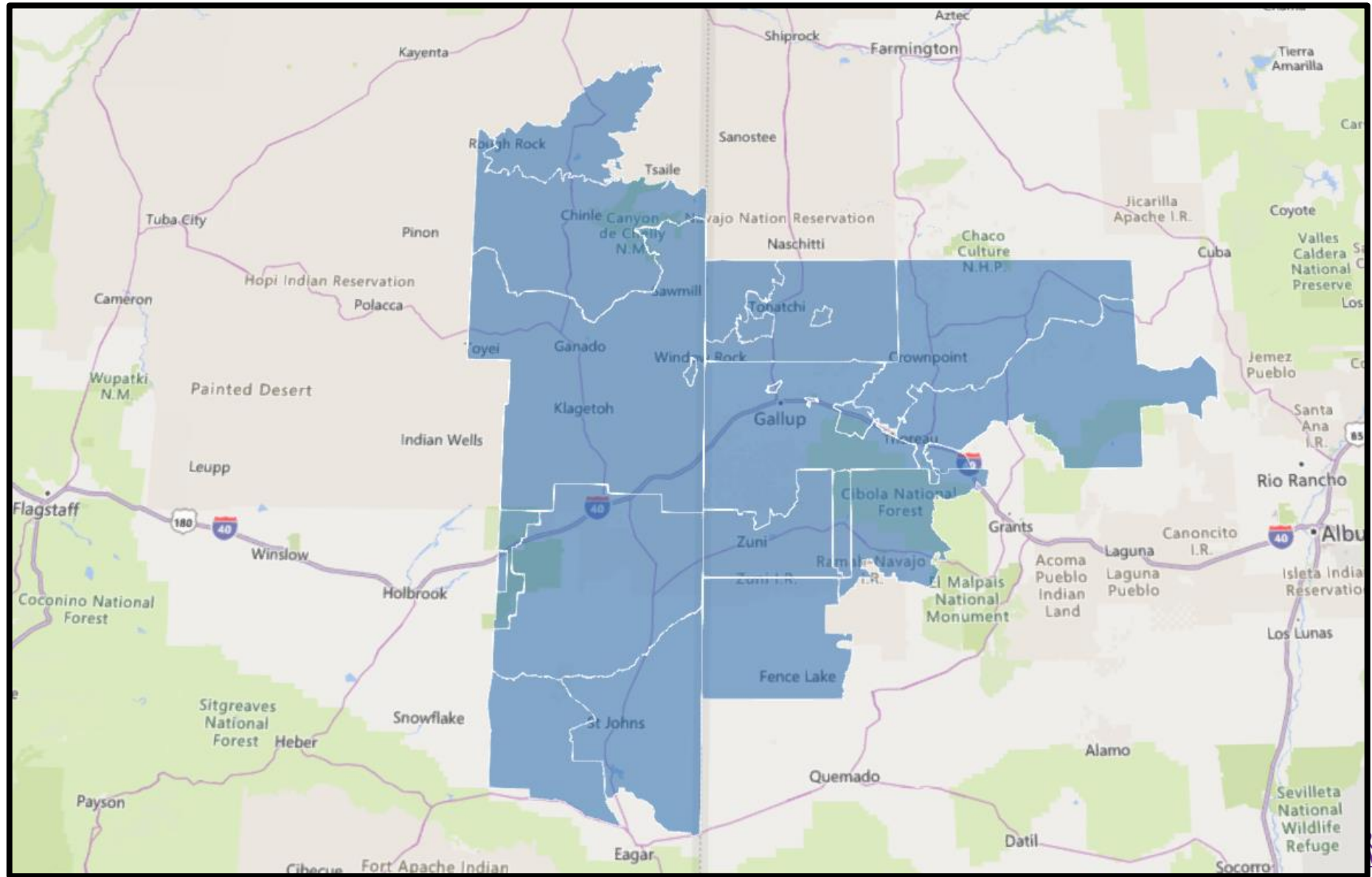
Data Sources (continued)

- **Gallup-Area Employer Survey** (*Greater Gallup EDC invite, October 2021*)
 - 40 employers responded
 - Diverse response: size 1-9 to 500-999 employees
 - Gathered data on existing flight demand, GUP air service preferences, likely use of GUP flights, and anticipated economic impact of GUP flight service
- **Local Employer Focus Groups** (*October 2021*)
 - Three one-hour focus groups with representatives of private businesses, tribal nations, and local governments respectively
 - Explored topics similar to the Employer survey

GUP Catchment Area Profile

GUP Catchment Area (zip boundaries)

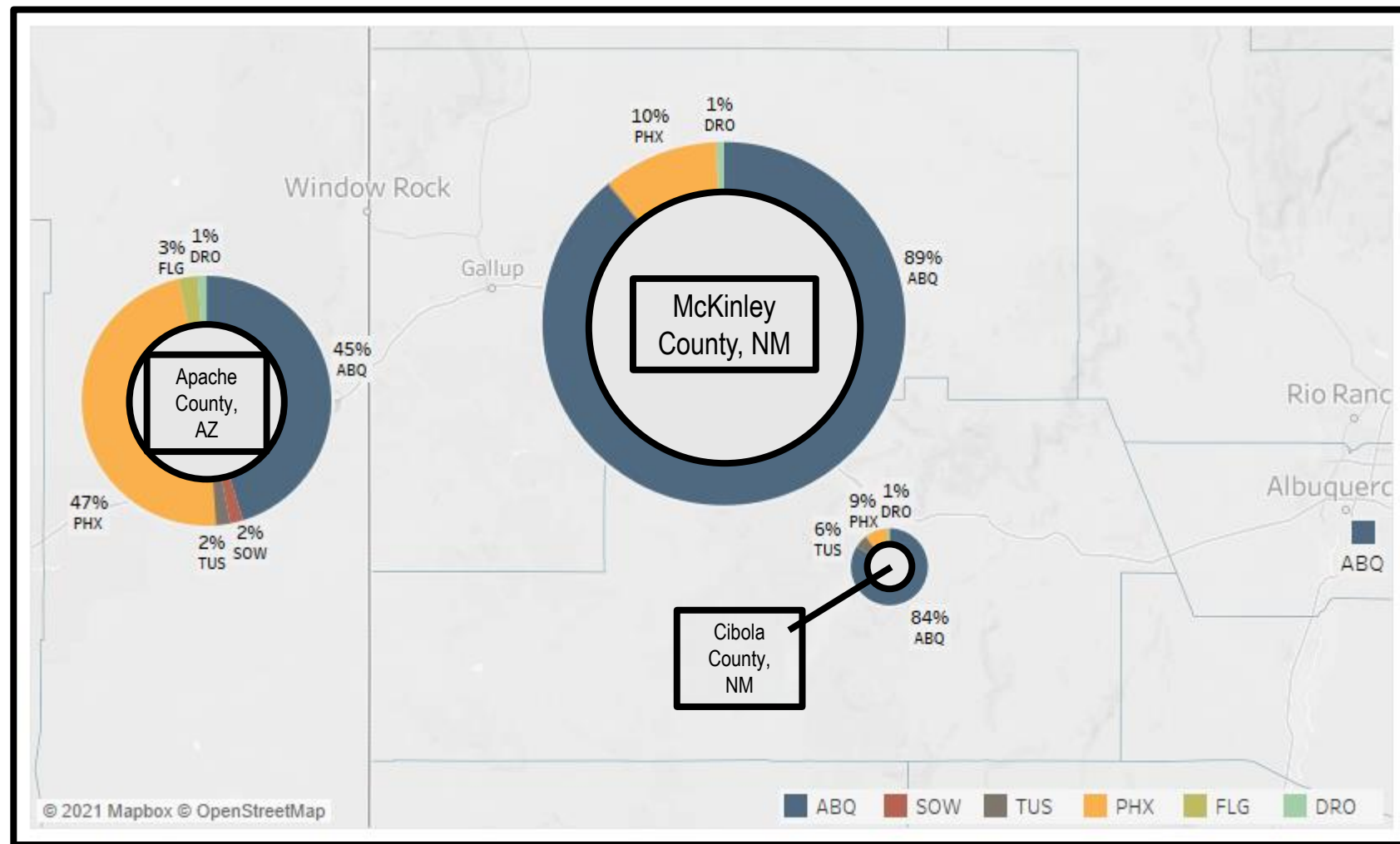
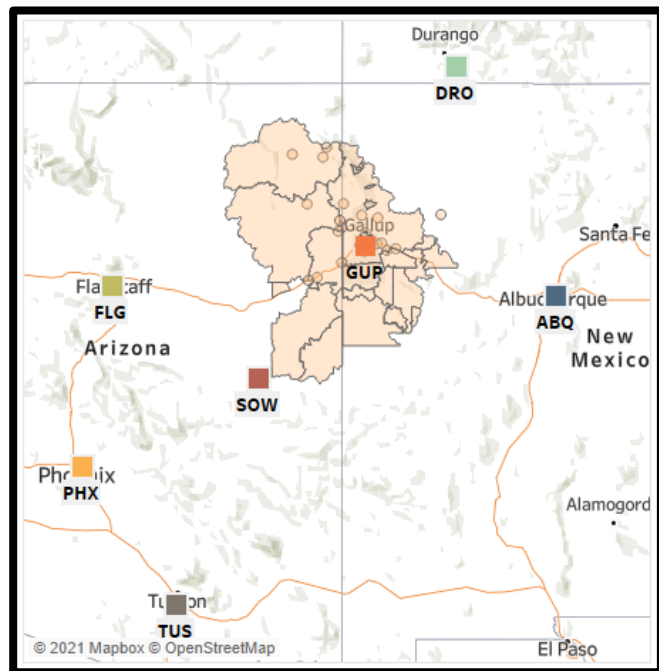
GUP catchment area includes significant portions of McKinley, Apache and Cibola counties



Local Airport Use in GUP Catchment Area

2016-21 ARC Air Passenger Ticket Itineraries

- The “donut” graphs are sized proportionate to the number of tickets purchased
- Colored segments illustrate the share of tickets departing from each airport
- **McKinley & Cibola county passengers primarily use ABQ. Apache County passengers split between ABQ & PHX.**



Source: Airlines Reporting Corporation (ARC); RRC Associates.

Note: Airport shares reflect tickets purchased through travel agencies (including online travel agencies). Airlines not participating in the ARC system are excluded (e.g. Southwest, Frontier, Allegiant and Spirit).

Zip Code Profiles: GUP Catchment Area

Catchment area passenger shares closely match income shares (and to a lesser extent population shares) at the county level.

McKinley County accounts for 60.7% of catchment-area household income and 65.9% of ARC airline passengers.

County	City	ZIP Code	ZCTA	ZCTA	Mean	Aggregate	% of Population	% of	% of Air
			Population (2015-19 ACS)	Households (2015-19 ACS)	Household Income (2015-19 ACS)	Household Income (2015-19 ACS)		Aggregate Income	Passengers 2016-21 (ARC)
Apache	Saint Johns	85936	4,373	1,074	\$54,580	\$58,618,920	3.4%	3.4%	6.4%
Apache	Chinle	86503	10,818	3,266	\$35,712	\$116,635,392	8.4%	6.8%	5.3%
Apache	Window Rock	86515	4,251	1,290	\$39,629	\$51,121,410	3.3%	3.0%	5.2%
Apache	Fort Defiance	86504	7,201	1,780	\$49,637	\$88,353,860	5.6%	5.2%	4.6%
Apache	Concho	85924	2,660	1,202	\$52,462	\$63,059,324	2.1%	3.7%	3.0%
Apache	Ganado	86505	8,036	2,066	\$35,067	\$72,448,422	6.3%	4.2%	1.6%
Apache	Saint Michaels	86511	3,680	1,021	\$44,209	\$45,137,389	2.9%	2.6%	1.5%
Apache	Sanders	86512	2,787	685	\$37,704	\$25,827,240	2.2%	1.5%	1.2%
Apache	Many Farms	86538	1,825	657	\$36,476	\$23,964,732	1.4%	1.4%	0.6%
Apache	Lukachukai	86507	2,323	578	\$31,131	\$17,993,718	1.8%	1.1%	0.5%
Apache	Tsaile	86556	2,324	513	\$36,351	\$18,648,063	1.8%	1.1%	0.4%
Apache	Lupton	86508	668	199	\$31,584	\$6,285,216	0.5%	0.4%	0.4%
Apache	Chambers	86502	1,095	357	\$28,883	\$10,311,231	0.9%	0.6%	0.2%
Apache	Houck	86506	1,266	395	\$34,990	\$13,821,050	1.0%	0.8%	0.1%
Apache	Petrified Forest Natl Pk	86028	0	0	n/a	n/a	0.0%	n/a	0.1%
Apache	Nazlini	86540	1,120	268	\$23,251	\$6,231,268	0.9%	0.4%	0.0%
Apache Total (in GUP catchment)			54,427	15,351	\$40,288	\$618,457,235	42.5%	36.1%	31.2%
Cibola	Ramah	87321	2,431	860	\$49,093	\$42,219,980	1.9%	2.5%	2.3%
Cibola	Pinehill	87357	769	219	\$38,317	\$8,391,423	0.6%	0.5%	0.5%
Cibola	Fence Lake	87315	190	77	\$36,252	\$2,791,404	0.1%	0.2%	0.2%
Cibola Total (in GUP catchment area)			3,390	1,156	\$46,196	\$53,402,807	2.6%	3.1%	3.0%
McKinley	Gallup	87301	24,592	7,857	\$64,994	\$510,657,858	19.2%	29.8%	43.9%
McKinley	Gallup	87305	3,209	955	\$38,122	\$36,406,510	2.5%	2.1%	7.4%
McKinley	Zuni	87327	9,002	1,898	\$48,348	\$91,764,504	7.0%	5.4%	2.7%
McKinley	Crownpoint	87313	5,967	1,727	\$47,220	\$81,548,940	4.7%	4.8%	2.3%
McKinley	Thoreau	87323	4,015	1,324	\$33,464	\$44,306,336	3.1%	2.6%	2.3%
McKinley	Jamestown	87347	160	96	\$61,531	\$5,906,976	0.1%	0.3%	1.2%
McKinley	Church Rock	87311	4,084	1,106	\$35,664	\$39,444,384	3.2%	2.3%	1.2%
McKinley	Tohatchi	87325	3,110	867	\$44,649	\$38,710,683	2.4%	2.3%	0.8%
McKinley	Gamero	87317	1,778	519	\$55,801	\$28,960,719	1.4%	1.7%	0.7%
McKinley	Rehoboth	87322	276	72	\$86,640	\$6,238,080	0.2%	0.4%	0.6%
McKinley	Navajo	87328	2,372	717	\$38,365	\$27,507,705	1.9%	1.6%	0.6%
McKinley	Vanderwagen	87326	1,690	499	\$35,794	\$17,861,206	1.3%	1.0%	0.5%
McKinley	Continental Divide	87312	439	172	\$37,576	\$6,463,072	0.3%	0.4%	0.4%
McKinley	Yatahey	87375	3,390	823	\$43,197	\$35,551,131	2.6%	2.1%	0.4%
McKinley	Fort Wingate	87316	1,086	298	\$43,307	\$12,905,486	0.8%	0.8%	0.3%
McKinley	Prewitt	87045	1,572	508	\$33,615	\$17,076,420	1.2%	1.0%	0.3%
McKinley	Mentmore	87319	2,014	569	\$33,445	\$19,030,205	1.6%	1.1%	0.2%
McKinley	Smith Lake	87365	n/a	n/a	n/a	n/a	n/a	n/a	0.0%
McKinley	Brimhall	87310	1,081	270	\$44,423	\$11,994,210	0.8%	0.7%	0.0%
McKinley	Nakaibito	87320	519	169	\$40,899	\$6,911,931	0.4%	0.4%	0.0%
McKinley Total (in GUP catchment)			70,356	20,446	\$50,829	\$1,039,246,356	54.9%	60.7%	65.9%
Grand Total (in GUP catchment area)			128,173	36,953	\$46,305	\$1,711,106,398	100.0%	100.0%	100.0%

GUP Flight Demand: Realized Demand vs. Potential Demand

Concepts of Realized and Potential Demand

- **“Realized”/ actualized** GUP-area resident flight demand has been estimated from indicators of local resident passenger volume and ticket purchase activity. It represents estimated actual passenger volume by GUP-area residents.
- **“Potential” (realized + unrealized/latent)** GUP-area resident flight demand has been estimated modeled based on local demographics and socioeconomic data. This represents flight volume that might be predicted by socioeconomic measures, and could potentially be realized over time if flight service was available and attractive (assuming this leads to changed travel behaviors). This demand also includes some general aviation/charter passenger traffic at regional airports (e.g. Window Rock) that could potentially be converted to commercial airline traffic.
- **Analysis suggests that the GUP area has less realized (actualized) flight demand than might be expected from its population, income, GDP, etc.**
- With Gallup located approximately 142 miles / 2 hours’ drive from ABQ, and much of the GUP catchment area even more **remote from a commercial service airport**, the proximity of new flight service at GUP might **stimulate incremental “realized” flight demand**.
- As future air service is contemplated for GUP, demand evaluations might take into account **both “realized” and “potential/unrealized” demand**.
- **Covid-19** is a wild card. Much of the analysis to follow estimates GUP-area demand as of 2019, under the assumption that future demand will soon rebound to 2019 levels. As of August 2021, T-100 passenger volume was 72% of August 2019 levels at ABQ, and 83% of August 2019 levels at PHX.

GUP Realized vs. Potential Passengers

- As of 2019, the GUP catchment area had an estimated 70,000 passengers in realized demand, vs. 190,000 passengers in potential demand (i.e. realized demand + unrealized potential demand).
- The average of realized and potential demand was approximately 130,000 passengers, of which approximately 65,000 passengers were GUP-area residents.
- The addition of GUP air service may help convert some unrealized potential / latent demand to actual demand. Thus, the average of realized and potential passengers is used for purposes of evaluating demand for future GUP air service (later section).

Measure	2019 passengers (sum of both directions)
1. Actual realized passengers	
Actual realized passengers - estimate method 1 (mobility data)	68,502
Actual realized passengers - estimate method 2 (ARC data)	72,229
Average of methods 1 & 2 - actual realized passengers	70,366
x Assumed share of passengers attributable to local residents	50%
Actual realized passengers attributable to local residents	35,183
2. Potential passengers	189,763
3. Average of realized and potential passengers	
Average of actual and potential passengers	130,064
x Assumed share of passengers attributable to local residents	50%
Average of actual and potential passengers - GUP catchment residents only	65,032

Remaining slides in this section provide calculation detail for the estimates shown in table

Realized Demand Estimate #1 – per Mobility Data

- Analysis indicates 68,500 passengers traveling to/from GUP catchment area in 2019

Variable	Value	Data source
Share of ABQ catchment area passengers who live in GUP catchment area, Oct. 2019 - Sep. 2021	1.18%	Environics; RRC
ABQ originating pax (one-way, 2019)	1,185,825	US DOT O/D
GUP resident pax originating at ABQ (one-way, 2019)	13,984	
Share of GUP enplanements at ABQ (remainder at PHX, TUS, FLG, etc.)	81.7%	ARC; RRC
GUP resident pax originating at ABQ, PHX and other local airports (one-way, 2019)	17,125	
x2 to conver GUP local resident pax to both directions combined	34,251	
Share of total travelers to/from GUP area which are inbound visitors	50%	US DOT O/D - GUP flights, 2007/08
GUP resident + visitor pax - sum of both directions, 2019	68,502	

Realized demand estimate #1 (cont'd): ABQ catchment area cross-check

- Environics and Safegraph mobility data yield similar estimates of the share of ABQ catchment area passengers (flying from ABQ) who live in McKinley, Cibola and Apache counties.
- This adds confidence in the estimates of GUP-area flight demand which is actualized at ABQ.

State, County	Share of ABQ catchment area pax at ABQ, by county	
	Environics (Oct 2019-Sep 2021)	Safegraph (Dec 20 - Feb 21)
New Mexico, Bernalillo	64.1%	70.7%
New Mexico, Sandoval	13.3%	11.9%
New Mexico, Santa Fe	7.1%	3.0%
New Mexico, Valencia	4.4%	5.4%
New Mexico, San Juan	1.6%	1.6%
New Mexico, Los Alamos	1.4%	0.4%
New Mexico, McKinley	0.9%	0.8%
New Mexico, Rio Arriba	0.9%	0.7%
New Mexico, Taos	0.8%	0.5%
New Mexico, Torrance	0.6%	1.0%
New Mexico, Socorro	0.6%	0.6%
New Mexico, Chaves	0.6%	0.7%
New Mexico, San Miguel	0.5%	0.3%
Colorado, La Plata	0.5%	0.3%
New Mexico, Cibola	0.4%	0.4%
New Mexico, Lincoln	0.3%	0.3%
New Mexico, Sierra	0.3%	0.2%
Arizona, Apache	0.3%	0.4%
New Mexico, Colfax	0.3%	0.2%
Colorado, Archuleta	0.2%	n/a
New Mexico, Guadalupe	0.1%	0.2%
New Mexico, Grant	0.1%	0.0%
Colorado, Alamosa	0.1%	0.3%
New Mexico, De Baca	0.1%	0.0%
Colorado, Montezuma	0.1%	0.0%
New Mexico, Mora	0.1%	0.1%
Colorado, Conejos	0.1%	n/a
New Mexico, Catron	0.1%	0.1%
Colorado, Rio Grande	0.0%	0.0%
New Mexico, Harding	0.0%	0.0%
New Mexico, Hidalgo	0.0%	n/a
Colorado, Costilla	0.0%	n/a
TOTAL	100.0%	100.0%
Sum of McKinley, Cibola, Apache	1.6%	1.5%

Realized Demand Estimate #2 – per ARC Data

- ARC-based estimation approach suggests approximately 72,200 GUP passengers traveling to/from GUP catchment area in 2019 – similar to 68,500 passengers per estimate #1 (mobility data approach)

Variable	Value	Data source
Total one-way trips in ARC database by GUP catchment residents from ABQ, 2016-19	4,163	ARC, RRC Associates
/ Years of coverage, 2016 - 2019	4	
= Average trips / year (2016-19)	1,041	
GUP annual resident round-trips from ABQ, if ARC captures 7.06% of ABQ trips	14,745	Adjustment from 10% national avg due to lower share of flights on ARC airlines at ABQ (52%) than nationwide (33%) in 2019
/ Share of GUP enplanements at ABQ (remainder at PHX, TUS, FLG, etc.)	81.7%	ARC; RRC
= GUP resident pax originating at ABQ, PHX and other local airports (one-way, 2019)	18,057	
x x2 to conver GUP local resident pax to both directions combined	36,115	
/ Share of total travelers to/from GUP area which are inbound visitors	50%	US DOT O/D - GUP flights, 2007/08
= GUP resident + visitor pax - sum of both directions, 2019	72,229	

GUP Potential Demand Estimate – Step 1

- ESRI spending estimates suggest GUP catchment area residents would be expected to spend 34% as much as the average US resident on airfares in 2021.

(ESRI estimates derived from 2018 - 2019 US BLS Consumer Expenditure Surveys)

Geography	Population 2021	Households 2021	Household Spending Potential Index 2021 (US=100)	Individual Spending Potential Index 2021 (US=100)	Average Airfare Spend per Household 2021	Average Airfare Spend per Person 2021	Total Spend on Airfares 2021	Source
Entire US	333,934,112	126,470,675	100	100	\$629.11	\$238.26	\$79,563,966,349	ESRI
GUP catchment area:								
15 mile radius around GUP	36,297	12,109	54	48	\$342.67	\$114.32	\$4,149,430	ESRI
30 mile radius around GUP	62,532	20,181	48	41	\$299.82	\$96.76	\$6,050,764	ESRI
45 mile radius around GUP	91,381	28,808	44	36	\$275.20	\$86.76	\$7,927,827	ESRI
15-45 mile doughnut around GUP	55,084	16,699	36	29	\$226.26	\$68.59	\$3,778,397	ESRI
GUP catchment area beyond 45 mile radius (if similar per person spend to 15-45 mile doughnut)	36,792	8,145	49	29	\$309.84	\$68.59	\$2,523,687	RRC assumption
Entire GUP catchment area	128,173	36,953	45	34	\$282.83	\$81.54	\$10,451,514	ESRI; RRC

GUP Potential Demand Estimate – Step 2

- GUP catchment area might be expected to generate 190,000 annual inbound & outbound passengers, assuming per capita travel spend is 34% of the US resident average, and inbound visitor passenger volume is equal to outbound resident volume.
- The 190,000 passengers below compares to 195,000 passengers estimated in the April 2014 GUP True Market Study (Sixel Consulting Group). Additionally, the 1.48 passengers per capita below ($0.74 * 2 = 1.48$) compares to 1.63 passengers per capita in the 2014 study.
- For reference, in 2020, average round-trip airfares net of taxes/fees at ABQ (\$368) were similar to the US airport average (\$352), suggesting some equivalence between relative airfare spend and relative flight volume in local travel estimates.

Measure	Value (2019)	Source
US airports domestic O/D trips (sum of both directions)	590,475,977	US BTS O/D
+ US resident international flights, 2019 (sum of both directions)	119,509,560	US OTTI; RRC
= Total flights by US residents (sum of both directions)	709,985,538	
/ US population 2019	328,239,523	US Census
= Flights/capita in 2019, US (each direction = 1 flight)	2.16	
x GUP catchment resident airfare purchases as % of US average	34%	Derived previously
= Flights/capita in 2019, GUP catchment residents	0.74	
x Population in GUP catchment area, 2015-19	128,173	US Census
= GUP catchment resident flights (sum of both directions)	94,882	
/ Share of total travelers to/from GUP area which are inbound visitors	50%	US DOT O/D - GUP flights, 2007/08
= Total passengers to/from GUP area, residents + visitors	189,763	

GUP Passengers by Market, 2019

GUP Passengers by Demand Type & Market, 2019

- Table shows results for the three categories of demand described in previous section
- For the midpoint between realized and potential demand, leading markets are the Los Angeles basin (PDEW = passengers daily each way=10.8), the Bay Area (PDEW 9.8), and Dallas/Ft Worth (PDEW 8.8)

			2019 Realized Demand				2019 Potential Demand (realized + unrealized)				Average of Realized and Potential Demand				Metrics Which Apply to All Demand Categories			
Rank	City	Airport(s)	Pax (both directions combined)	Net revenues (both directions combined)	PDEW	RDEW	Pax (both directions combined)	Net revenues (both directions combined)	PDEW	RDEW	Pax (both directions combined)	Net revenues (both directions combined)	PDEW	RDEW	Avg one- way fare	% of Pax	% of Revenue	% of Pax Originating from GUP area
1	Los Angeles Basin	LAX, SNA, BUR, ONT, LGB	4,283	\$518,153	5.9	\$710	11,550	\$1,397,365	15.8	\$1,914	7,916	\$957,759	10.8	\$1,312	\$121	6.0%	4.0%	51.4%
2	San Francisco Bay Area	SFO, OAK, SJC	3,872	\$558,543	5.3	\$765	10,441	\$1,506,288	14.3	\$2,063	7,156	\$1,032,415	9.8	\$1,414	\$144	5.5%	4.3%	48.3%
3	Dallas/Ft Worth	DFW, DAL	3,489	\$530,298	4.8	\$726	9,408	\$1,430,118	12.9	\$1,959	6,448	\$980,208	8.8	\$1,343	\$152	4.9%	4.1%	41.5%
4	New York/Newark	JFK, EWR, LGA, ISP, HPN	3,257	\$607,258	4.5	\$832	8,783	\$1,637,664	12.0	\$2,243	6,020	\$1,122,461	8.2	\$1,538	\$186	4.6%	4.6%	46.9%
5	Seattle	SEA	3,083	\$406,730	4.2	\$557	8,314	\$1,096,878	11.4	\$1,503	5,699	\$751,804	7.8	\$1,030	\$132	4.3%	3.1%	45.4%
6	Washington / Baltimore	DCA, IAD, BWI	3,039	\$671,659	4.2	\$920	8,196	\$1,811,343	11.2	\$2,481	5,618	\$1,241,501	7.7	\$1,701	\$221	4.3%	5.1%	47.8%
7	Chicago	ORD, MDW	2,803	\$509,040	3.8	\$697	7,558	\$1,372,787	10.4	\$1,881	5,180	\$940,913	7.1	\$1,289	\$182	4.0%	3.9%	46.0%
8	Las Vegas	LAS	2,631	\$283,229	3.6	\$388	7,095	\$763,816	9.7	\$1,046	4,863	\$523,522	6.7	\$717	\$108	3.7%	2.2%	74.5%
9	San Diego	SAN	2,569	\$282,022	3.5	\$386	6,927	\$760,561	9.5	\$1,042	4,748	\$521,291	6.5	\$714	\$110	3.6%	2.2%	58.1%
10	Phoenix/Mesa	PHX, AZA	2,504	\$285,196	3.4	\$391	6,752	\$769,123	9.2	\$1,054	4,628	\$527,160	6.3	\$722	\$114	3.5%	2.2%	48.8%
11	Denver	DEN	2,458	\$263,693	3.4	\$361	6,629	\$711,133	9.1	\$974	4,544	\$487,413	6.2	\$668	\$107	3.5%	2.0%	46.4%
12	Orlando/Sanford	MCO, SFB, LAL	1,874	\$318,558	2.6	\$436	5,054	\$859,094	6.9	\$1,177	3,464	\$588,826	4.7	\$807	\$170	2.6%	2.4%	68.0%
13	Portland	PDX	1,564	\$223,697	2.1	\$306	4,218	\$603,269	5.8	\$826	2,891	\$413,483	4.0	\$566	\$143	2.2%	1.7%	46.0%
14	Minneapolis	MSP	1,141	\$179,725	1.6	\$246	3,078	\$484,685	4.2	\$664	2,109	\$332,205	2.9	\$455	\$157	1.6%	1.4%	38.7%
15	Houston	HOU, IAH	1,088	\$190,341	1.5	\$261	2,935	\$513,314	4.0	\$703	2,012	\$351,827	2.8	\$482	\$175	1.5%	1.5%	41.2%
16	Boston	BOS	999	\$209,053	1.4	\$286	2,695	\$563,778	3.7	\$772	1,847	\$386,415	2.5	\$529	\$209	1.4%	1.6%	47.3%
17	South Florida	MIA, FLL, PBI	914	\$174,955	1.3	\$240	2,464	\$471,822	3.4	\$646	1,689	\$323,388	2.3	\$443	\$192	1.3%	1.3%	59.5%
18	Sacramento	SMF	857	\$130,637	1.2	\$179	2,311	\$352,305	3.2	\$483	1,584	\$241,471	2.2	\$331	\$152	1.2%	1.0%	41.4%
19	Kansas City	MCI	844	\$157,926	1.2	\$216	2,277	\$425,897	3.1	\$583	1,561	\$291,912	2.1	\$400	\$187	1.2%	1.2%	49.6%
20	Austin	AUS	816	\$94,811	1.1	\$130	2,202	\$255,688	3.0	\$350	1,509	\$175,249	2.1	\$240	\$116	1.2%	0.7%	44.1%
21	Philadelphia	PHL	797	\$176,270	1.1	\$241	2,150	\$475,369	2.9	\$651	1,473	\$325,820	2.0	\$446	\$221	1.1%	1.3%	44.5%
22	Pittsburgh	PIT	788	\$162,171	1.1	\$222	2,125	\$437,346	2.9	\$599	1,456	\$299,758	2.0	\$411	\$206	1.1%	1.2%	44.3%
23	Grand Rapids	GRR	705	\$141,104	1.0	\$193	1,902	\$380,531	2.6	\$521	1,304	\$260,817	1.8	\$357	\$200	1.0%	1.1%	42.0%
24	New Orleans	MSY	633	\$114,424	0.9	\$157	1,706	\$308,580	2.3	\$423	1,169	\$211,502	1.6	\$290	\$181	0.9%	0.9%	62.1%
25	Charlotte	CLT	624	\$127,739	0.9	\$175	1,683	\$344,489	2.3	\$472	1,154	\$236,114	1.6	\$323	\$205	0.9%	1.0%	46.6%
	All other		23,317	\$5,749,209	31.9	\$7,876	62,881	\$15,504,570	86.1	\$21,239	43,099	\$10,626,890	59.0	\$14,557	\$247	32.9%	44.0%	49.2%
	Grand total		70,948	\$13,066,442	97.2	\$17,899	191,334	\$35,237,814	262.1	\$48,271	131,141	\$24,152,128	179.6	\$33,085	\$184	100.0%	100.0%	49.6%

GUP Route Analyses: DEN, DFW, LAX, PHX

Airports Chosen for Route Analyses | Selection Criteria

(DEN=Denver, DFW=Dallas/Ft Worth, LAX=Los Angeles International, PHX=Phoenix)

- Airport serves a large metro area, and is a major flight hub with significant connecting service.
- Airport is within a 400 mile radius of GUP (roughly 1.5 hour flight time), for cost-effectiveness and practicality of service with 9-seat planes.
 - For context, 98% of scheduled airline routes flown by 1-9 seat planes in January 2022 in the continental US are 400 miles long or less.
 - LAX (558 miles) and DFW (696 miles) are well beyond this 400 mile distance, and are likely impractical for consideration.
 - However, given their strategic importance for economic development and (esp. in the case of DFW) breadth of flight connections, they are included as possible future route offerings.
- Airport is likely to generate sufficient demand to support GUP air service.
 - ABQ and Santa Fe airports are excluded (due to proximity/within driving distance of GUP, and low historical demand for GUP:ABQ service).
 - Salt Lake City (SLC) was probed in GUP employer survey, but demand appears to be low relative to other airports (well behind PHX and DEN).

Summary Comparisons of Routes

- PHX and DEN are the two clear leaders, with PHX favored on most measures.
- DFW and LAX are likely too distant to be serious candidates at present time given parameters NM DOT grant program.
- Remainder of this section provides more background on route comparison measures.

Measure	PHX - Phoenix	DEN - Denver	DFW - Dallas	LAX - Los Angeles	Comments
Flight service measures					
One-way flight mileage from GUP	233	375	696	558	Longer distances to DFW / LAX mean higher costs and probably less service that can be funded
Airports in greater GUP region with flight service to PHX, DEN, etc.	Cortez, Durango, Flagstaff, Page, Show Low, Silver City	Cortez, Durango, Flagstaff	Durango, Flagstaff	Durango	PHX has the most connectivity to airports in the greater GUP region
Employer survey results					
What cities do your employees fly to most frequently? <i>(Please list up to 5)</i>	29%	42%	45%	19%	DFW and DEN lead
Cities that visitors to your org. most commonly fly from <i>(Please list up to 5)</i>	35%	47%	41%	24%	DFW and DEN lead (caution due to smaller sample)
Share of businesses that would fly from GUP to airport if 2-3/day service were available	67%	72%	not asked	not asked	DEN & PHX similar (DFW and LAX not tested)
Top choice for airline service from GUP	47%	29%	not asked	not asked	PHX leads (although DFW and LAX not tested)
Top 2 choices for airline service from GUP	76%	76%	not asked	not asked	PHX & DEN similar (DFW and LAX not tested)
GUP passengers daily each way (PDEW)					
Potential GUP PDEW: Destination & connecting pax	57.0	66.9	61.0	21.3	DEN, DFW, PHX are strongest
Potential GUP PDEW: Destination pax only	6.3	6.2	8.8	10.8	LAX and DFW are strongest
Historic GUP PDEW, Nov 2007 - Mar 2008	6.9	5.8	--	--	PHX and DEN had moderate demand. Flight frequency was 2x/day M-F, 1/x day Sa-Su. Flight to DEN had a stop point in Farmington. Flights were on 19 seat Beechcraft operated by Great Lakes Aviation. No codeshare.
Historic GUP PDEW, Jul 1995 - Jun 1997	27.2	12.1	--	--	PHX had robust demand; DEN moderate demand. Flight frequency averaged 2.8-2.9 flights/day to each airport. Flight to DEN had a stop point in Farmington. Operated by Mesa Airlines. Codeshare with America West Airlines.

Passenger Demand for Potential GUP Routes

Destination Passengers Only (connecting passengers excluded)

- Looking at destination demand only (connecting passengers excluded), LAX is the top potential route for GUP, with an estimated 10.8 PDEW, enough to support up to 2 round-trip flights daily (assuming 100% market capture and 5 seats sold per flight).
- Destination demand is sufficient to support 1 flight/day from DFW, PHX and DEN (assuming 100% market capture and a minimum of 5 seats sold per flight).
- LAX is the only route able to support 1 daily flight at 50% market capture. No routes are supportable at 25% market capture.
- Note: Demand estimates are based on averages of “realized” and “potential” demand.

Destination passengers only (i.e. pax beginning or ending air travel in subject city)								
		Estimated Annual GUP Demand					Supportable daily flights each way (if 5 pax per flight, on 9 seat planes)	
City	Airport	Pax (both directions combined)	Net revenues (both directions combined)	PDEW	RDEW	Avg one-way fare	At 100% market capture	At 50% market capture
Los Angeles Basin	LAX (assume capture demand for LAX, SNA, BUR, ONT, & LGB)	7,916	\$957,759	10.8	\$1,312	\$121	2	1
Dallas / Ft Worth	DFW (assume capture demand for DFW & DAL)	6,448	\$980,208	8.8	\$1,343	\$152	1	0
Phoenix/Mesa	PHX (assume capture demand for PHX & AZA)	4,628	\$527,160	6.3	\$722	\$114	1	0
Denver	DEN	4,544	\$487,413	6.2	\$668	\$107	1	0

Passenger volumes are based on average of realized and potential 2019 GUP passengers

Passenger Demand for Potential GUP Routes

Destination plus Connecting Passengers

- Looking at combined destination and connecting demand, DEN, DFW and PHX exhibit substantially higher demand than LAX, due to much greater connecting passenger potential as a result of more central locations (and less backhauling to reach many final destinations than at LAX).
- Destination and connecting demand is sufficient to support at least 2 flights daily in each direction to/from DEN, DFW and/or PHX at even 25% market capture (assuming a minimum of 5 seats sold per flight).
- How many pax would make connections, given likelihood of need to buy separate ticket, re-check bags, and pass thru TSA in connecting airport?
 - Per GUP employer survey, 29% of employers say these would be a significant deterrent to using GUP on future business trips; 26% say these would be a moderate deterrent; and 45% say these would be a slight deterrent or not a deterrent to using GUP (see Appendix-Employer Svy).
 - Given the likely challenges of connecting flights, the 25% market capture scenario might be most realistic (i.e. 1-3 supportable flights daily to each airport).

Destination plus targetable connecting passengers*

		Estimated Annual GUP Demand					Supportable daily flights each way (if 5 pax per flight, on 9 seat planes)		
City	Airport(s)	Pax (both directions combined)	Net revenues (both directions combined)	PDEW	RDEW	Avg one-way fare	At 100% market capture	At 50% market capture	At 25% market capture
Denver	DEN	48,804	\$9,391,695	66.9	\$12,865	\$121	13	6	3
Dallas / Ft Worth	DFW	44,533	\$8,401,260	61.0	\$11,509	\$152	12	6	3
Phoenix/Mesa	PHX	41,589	\$7,725,206	57.0	\$10,582	\$114	11	5	2
Los Angeles Basin	LAX	15,568	\$2,493,728	21.3	\$3,416	\$107	4	2	1

*Targetable connecting passengers are passengers that meet all of the following criteria:

- Final destination is NOT served by ABQ
- Final destination IS served by subject airport (DEN, DFW, PHX, or LAX respectively)
- Combined flight distance from GUP to subject airport (DEN, etc.) to final destination is no more than 1.5 times the shortest combined flight distance from ABQ to (any of DEN, DFW, PHX, or LAX) to final destination

Passenger volumes are based on average of realized and potential 2019 GUP passengers

Notable GUP Employer Survey Findings

Findings regarding use and preference for specific airports are in text and table below.

- Q4a. “What cities do your employees fly to most frequently by commercial air? (*Please list up to 5 destinations.*)”
 - Top responses: Dallas (listed by 45% of employers), Denver (42%), Phoenix (29%), Los Angeles (19%), Las Vegas (19%), Atlanta (19%)
- Q5a. “If known, please identify the cities that visitors to your organization most commonly fly from. (*Please list up to 5 cities.*)”
 - Top responses: Denver (47%), Dallas (41%), Phoenix (35%), Los Angeles (24%)
- Q8. “If commercial air service were available at Gallup Airport, how many “person trips” would your company likely take from Gallup Airport to each of the following airports per year?”
 - Share of respondents who would take at least one flight/year, by airport: Denver (72%), Phoenix (67%), Albuquerque (43%), Santa Fe (32%), Salt Lake City (30%).
- Q9. “If you could choose only one of the following airports for airline service to Gallup, which would you choose?”
 - Top choice: Phoenix (47%), Denver (29%), Albuquerque (24%), Salt Lake City (0%), Santa Fe (0%)
- Q10: “Which airport would be your second choice for airline service to Gallup?”
 - Top two choices combined: Phoenix (76%), Denver (76%), Albuquerque (37%), Salt Lake City (11%), Santa Fe (0%).

Question	PHX - Phoenix	DEN - Denver	DFW - Dallas	LAX - Los Angeles	Survey sample size (n=)	Comments
Q4a. What cities do your employees fly to most frequently? (<i>Please list up to 5</i>)	29%	42%	45%	19%	31	DFW and DEN lead
Q5a. Cities that visitors to your org. most commonly fly from (<i>Please list up to 5</i>)	35%	47%	41%	24%	17	DFW and DEN lead (caution due to smaller sample)
Q8. Share of businesses that would fly from GUP to airport if 2-3/day service were available	67%	72%	not asked	not asked	40	DEN & PHX similar (DFW and LAX not tested)
Q9. Top choice for airline service from GUP	47%	29%	not asked	not asked	38	PHX leads (although DFW and LAX not tested)
Q10. Top 2 choices for airline service from GUP	76%	76%	not asked	not asked	38	PHX & DEN similar (DFW and LAX not tested)

History of GUP air service

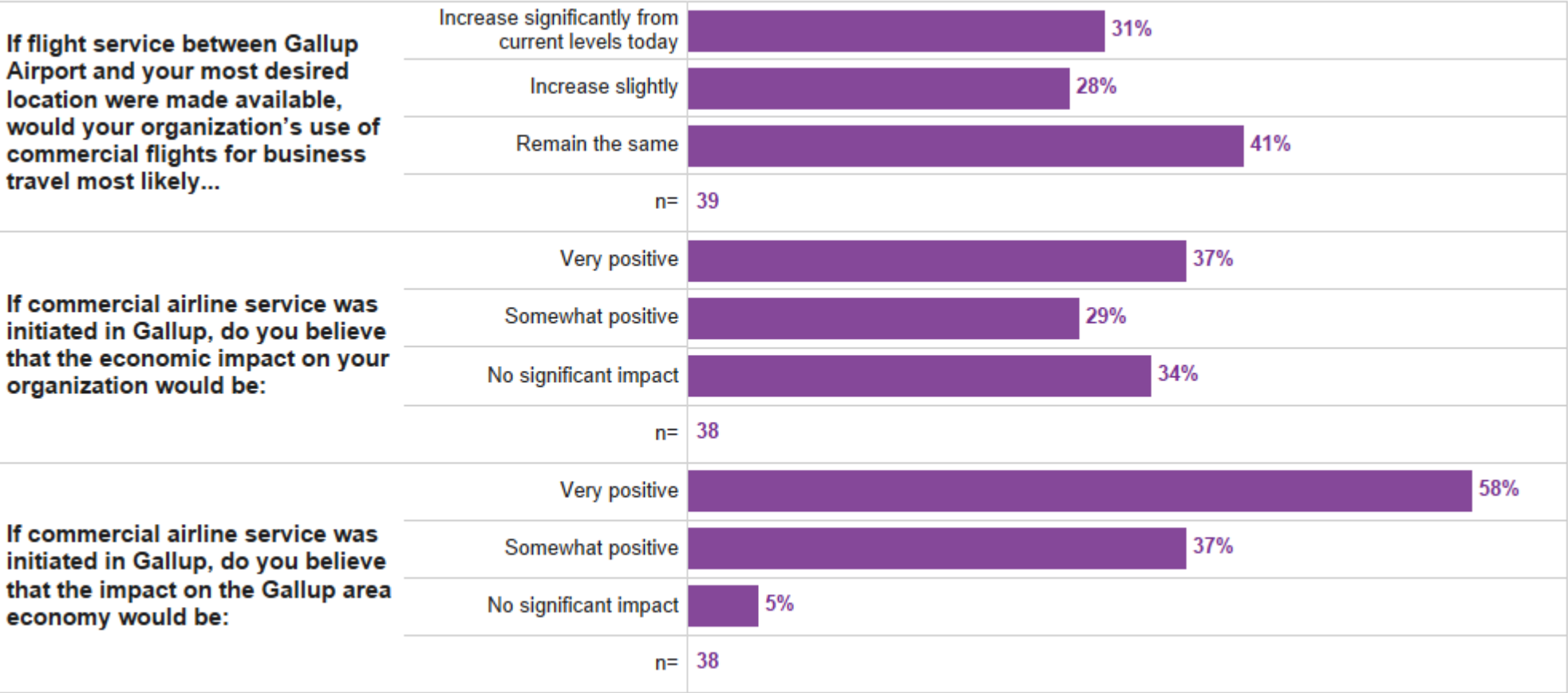
- Past episodes of air service to GUP were primarily conducted with 19-seat planes, in contrast to 9-seat planes now being evaluated.
- In 1995-97, GUP-PHX service averaged 27.2 PDEW, with 2.9 departures/day, and 9.4 onboards/departure. Strong passenger demand was bolstered by the high flight frequency (almost 3x/day) and code share connectivity with America West Airlines.
- Also in 1995-97, GUP-FMN service (usually continuing on to DEN) averaged 12.1 PDEW, with 2.8 departures/day, and 4.4 onboards/departure. Again, flight demand was likely aided by high frequency and America West codeshare.
- By contrast, passenger volume to both PHX and FMN/DEN was significantly lower in 2007-08. GUP-PHX averaged 4.8 PDEW in 2007-08, with 1.2 departures/day. GUP-FMN averaged 4.1 PDEW, with 1.2 departures/day.
 - The reduced frequency and probable lack of codeshare likely contributed to the lower travel volumes in 2007-08 than in 1995-97.
 - The history of service suggests that codeshare connectivity (if feasible) and higher frequency could significantly boost usage.
- GUP:ABQ service had minimal traffic (0.7 pax/departure) when offered in 2002, a sign that GUP:ABQ service would likely struggle today.

							Departures		Onboards			Seats						
Mkt	AI	Airline	Orig	Dest	Dest City	Miles	Dates	Total	Per Day	Total	Per Dep	Per Day	Total	Per Dep	Per Day	RPMs	ASMs	Load Factor
ZK		Great Lakes Aviation	GUP	PHX	Phoenix	233	Jul 2007 - Mar 2008	327	1.2	1,313	4.0	4.8	6,213	19.0	22.6	305,813	1,447,629	21.13
ZK		Great Lakes Aviation	GUP	FMN	Farmington	90	Jul 2007 - Mar 2008	320	1.2	1,135	3.5	4.1	6,080	19.0	22.1	102,105	547,200	18.66
ZK		Great Lakes Aviation	GUP	SOW	Show Low	110	Jul - Nov 2007	124	0.8	138	1.1	0.9	2,347	19.0	15.3	15,125	258,115	5.86
ZV		Great Lakes Aviation	GUP	ABQ	Albuquerque	127	Oct - Nov 2002	111	1.8	74	0.7	1.2	2,109	19.0	34.6	9,335	267,843	3.49
YV		Mesa Airlines	GUP	PHX	Phoenix	233	Jul 1995 - Jun 1997	2,117	2.9	19,901	9.4	27.2	40,876	19.3	55.9	4,636,817	9,523,992	48.69
YV		Mesa Airlines	GUP	FMN	Farmington	90	Jul 1995 - Jun 1997	2,030	2.8	8,879	4.4	12.1	39,412	19.4	53.9	799,065	3,547,035	22.53
RPMs = Revenue Passenger Miles = Miles * Total Onboards. ASMs = Available Seat Miles = Miles * Total Seats. Load Factor = RPMs / ASMs.																		

GUP Economic Impact

Employer survey: Impact of Flight Service to/from GUP

- Most responding businesses expect their air travel would increase significantly (31%) or increase slightly (28%) if GUP air service were available.
- Most businesses believe the economic impact of GUP air service to their business would be very positive (37%) or somewhat positive (29%).
- A large majority of businesses believe the impact of GUP air service on the Gallup economy would be very (58%) or somewhat (37%) positive.



Employer survey verbatim comments: “Any comments on your response regarding the economic impact of Gallup air service on your organization?”

- Flights out of Gallup would help out a lot of business owners save time.
- Gallup and the Navajo Nation would see an increased revenue due to travel and tourism, how much of an impact is hard to say, but I do think that ticket prices would play a lot into that.
- I used the GUP airport 4-5x/year in the past when the small aircraft (Mesa?) was linked to AmericaWest Airlines. I was able to use my "airline points" to fly to a hub to connect to the 2nd flight, paying no additional money, and avoiding the drive to Albuq. Also, sadly, with the lack of healthcare Providers in our area, recruiting Providers will be easier if they could also use their airline points to get in/out of Gallup quicker. In recruiting, many ask, Where is the nearest Airport? It would also be easier to attract Specialty Providers that would commute from a larger city.
- It needs to be close to a wash with the cost of driving to ABQ, staying in a hotel, and cost of parking. If the cost were close to a wash, it would be a used service.
- Key component for free trade zone designation
- More likely to impact personal than business travel...
- My business would not use the airport service but i know many people would use it for personal travel purposes.
- Need to be connect to big big hub like Dallas, which is better than Phoenix and Denver
- Speaking just for myself (but I am sure other hotels experience the same thing) Gallup does lose I would say quite a bit of business because of the lack of an airport. People don't want to fly to ABQ and then have the expense of renting a car and then driving over 2 hours (more now with all the road construction) to come to Gallup for a one or 2 day trip for meetings. They are having these meetings elsewhere. Also, if this does happen we need to then create a convention type facility that can hold between 500 - 1000 people too.
- We are state and federally funded. Typically, our travel costs aren't very high due to limited budget and the requirement to travel only within the state.
- While we wouldn't necessarily benefit greatly or directly from Air Service to and from Gallup we believe that Downtown Gallup would greatly benefit.

Employer focus groups: Observations regarding the economic impact of GUP air service

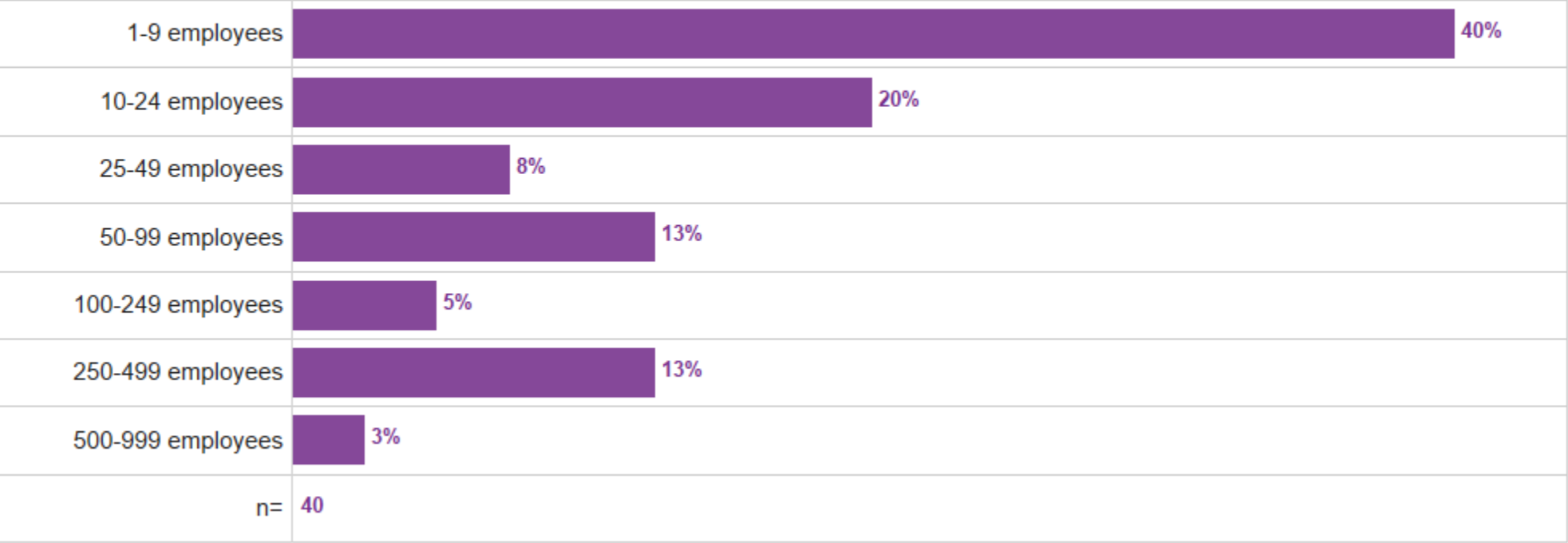
- GUP air service would allow executive-level leaders to better advocate for their organizations and the region by improving travel / accessibility.
- Air travel is very important to the functioning of tribal government. Use of charter flights and internal air fleet has limitations in terms of capacity, scheduling conflicts, costs, etc. Additional air service to the region would be helpful for added convenience and affordability. Official visitors may be more likely to stay in area (rather than ABQ) if had flight access.
- It is currently expensive and exhausting to fly via ABQ due to: 1) relatively high airfares at ABQ, 2) significant distance and drive time to ABQ (exacerbated by highway construction), and 3) concentration of flight times in the early morning and late evening (rather than during business hours), necessitating overnight stays in ABQ at the beginning and end of each trip.
- GUP air service would significantly aid in the hiring of medical professionals and contractors, many of whom aren't from the local area originally and travel a lot for vacation, visiting family, etc. An ability to bring in specialty providers would improve access to healthcare and open up new lines of business for healthcare.
- GUP air service could help boost tourism in the eastern portions of the Navajo Nation. Many tourists stay on the west side of the Nation. Would open up travel to Chaco Canyon, Shiprock, etc. Would improve relations between Nation and border towns (like Gallup) and give visitors more convenient access to the Nation.
- GUP air service would be healthy for community development and convey a message of business development/growth.
- GUP air service may boost local businesses that have a wealthy clientele, e.g. destination shoppers / wholesalers / retailers, buyers of Native American jewelry / textiles / rugs – option to fly would be nice.
- Air travel would be key to the launch and construction of Escalante hydrogen project. Construction employees would work multi-day on/off shifts and travel home frequently. Escalante project would also create many well-paid permanent jobs.
- Important air travel considerations: reliability; connections; scheduling (flights available during business hours); associated infrastructure (e.g. rental cars); opportunities to capitalize on tourism patterns (e.g. rodeos, strong west to east visitor flow).
- Cautions about air service: ensure that the City doesn't get financially over-extended; plan for long-term financial sustainability; focus on ways air travel can bring people in (more economically important than facilitating outbound travel by residents); recognize that existing tourism has an entrenched history of road-trip travel and a western history / off-the-grid ethos (how to square these with air travel?).

Appendix: GUP Employer Survey Results

Q1. Business Size

Responding businesses have a diversity of sizes

Including yourself, approximately how many people are employed by your business/organization in the greater Gallup area?



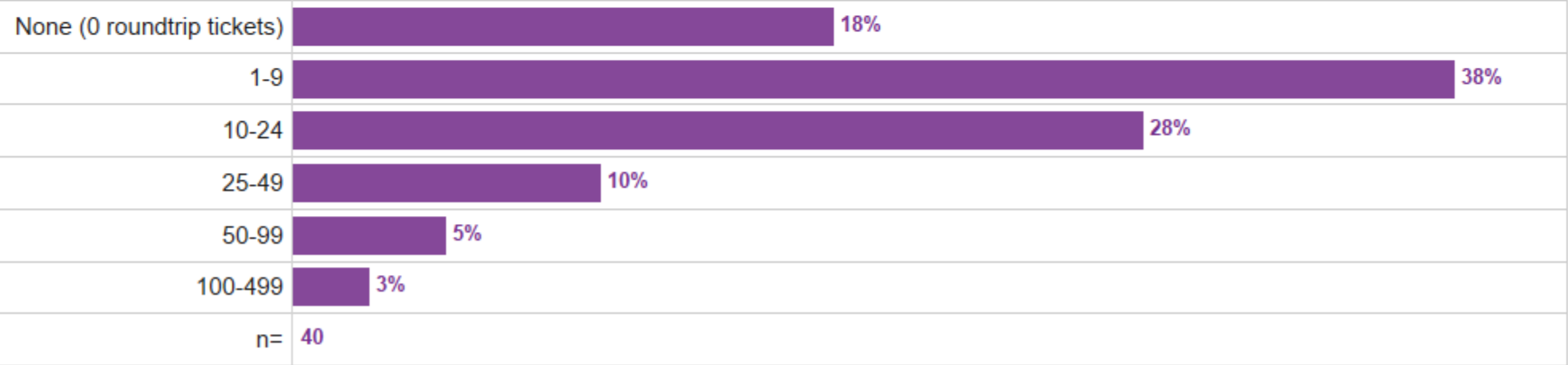
Q2 & Q3. Current Use of Flights

- 17% of responding employers use private or charter flights from local airports
- 82% of responding employers purchase commercial airline tickets for employee business trips

Do any of your employees travel for business by private aircraft or charter to/from Gallup Municipal Airport (GUP), Window Rock Airport, or other small airports in the greater Gallup region?



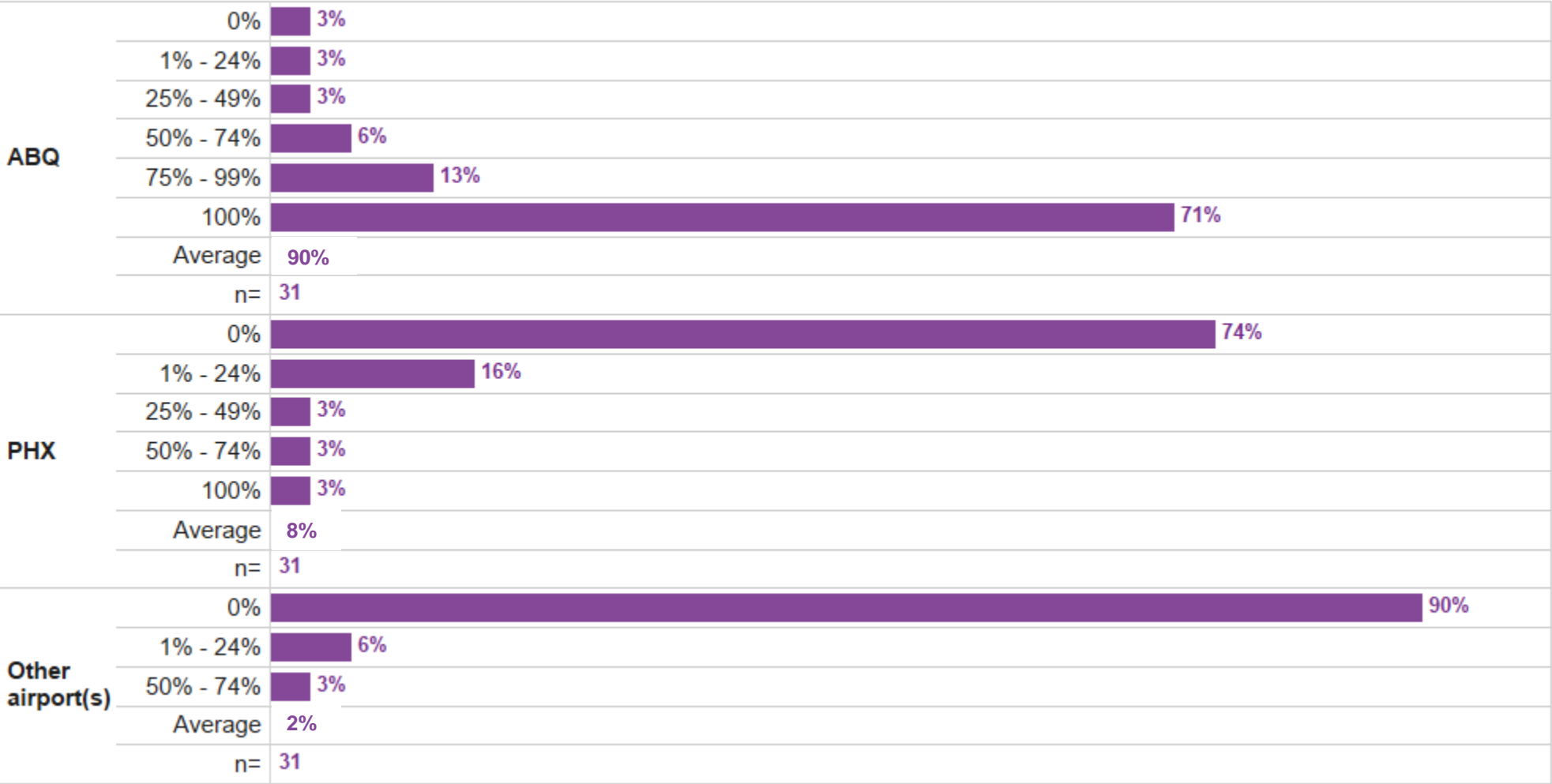
In a typical 12 month period (i.e., when not impacted by Covid-19), about how many roundtrip airline tickets does your organization purchase for employee business trips originating at ABQ or other airports in the region?



Q4. Use of Area Airports

ABQ serves the large majority of employee trips (90%), followed by PHX (8%) and other airports (2%)

What proportion of your employees' roundtrip flights in the past 12 months originated at the following airports?



Q4a. What cities do your employees fly to most frequently by commercial air? *(Please list up to 5 destinations.)*

Top destinations are Dallas (45%), Denver (42%), and Phoenix (29%)

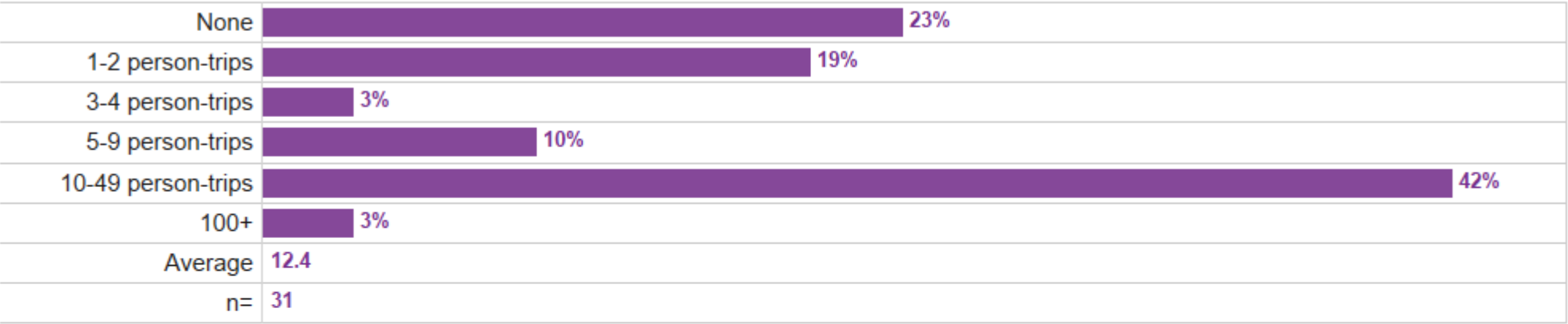
Cities/airports employees fly to most frequently by commercial air:

	Overall	by Top Choice Destination for Air Service to/from GUP		
		Phoenix	Denver	Albuquerque
Dallas	45%	33%	57%	50%
Denver	42%	33%	86%	13%
Phoenix	29%	47%		13%
Atlanta	19%	27%	14%	13%
Las Vegas	19%	20%		25%
Los Angeles	19%	13%	29%	25%
Chicago	13%		14%	38%
Houston	10%	13%		13%
Orlando	10%	7%		13%
San Diego	10%	7%		25%
Washington DC	10%	7%	14%	13%
Albuquerque	6%	13%		
Omaha	6%		29%	
St. Louis	6%	7%	14%	
Texas	6%	13%		
n=	31	15	7	8

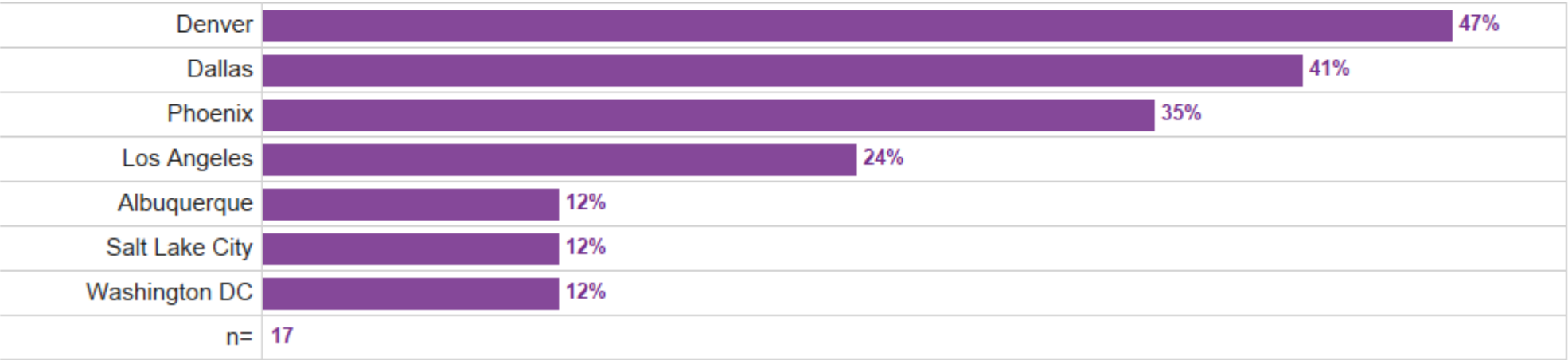
Q5 & 5a. Use of Flights by Visitors

- 77% of responding employers have visitors who fly to visit their business
- Top cities of origin of business fly visitors: Denver (47%), Dallas (41%), Phoenix (35%), Los Angeles (24%)

Approximately how many annual airline "person-trips" are attributable to visitors traveling specifically to visit your organization?



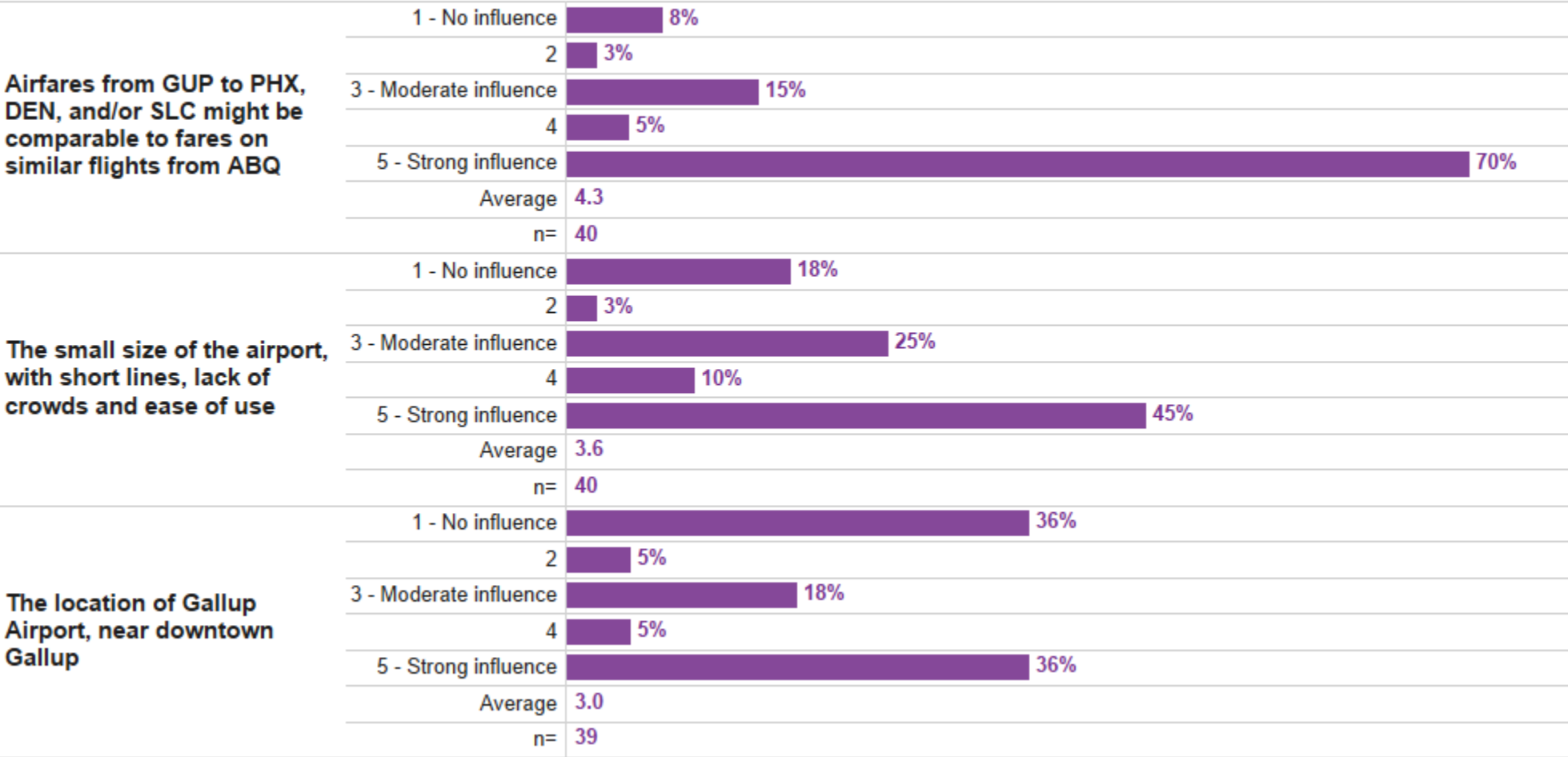
Cities/airports that visitors most commonly fly from:



Q6. GUP: Influential Factors

- Competitive airfares would be a “strong influence” for 70% of employers in decision whether to use GUP
- Small size of airport would be a “strong influence” to 45%
- Location of airport would be a “strong influence” to 36%

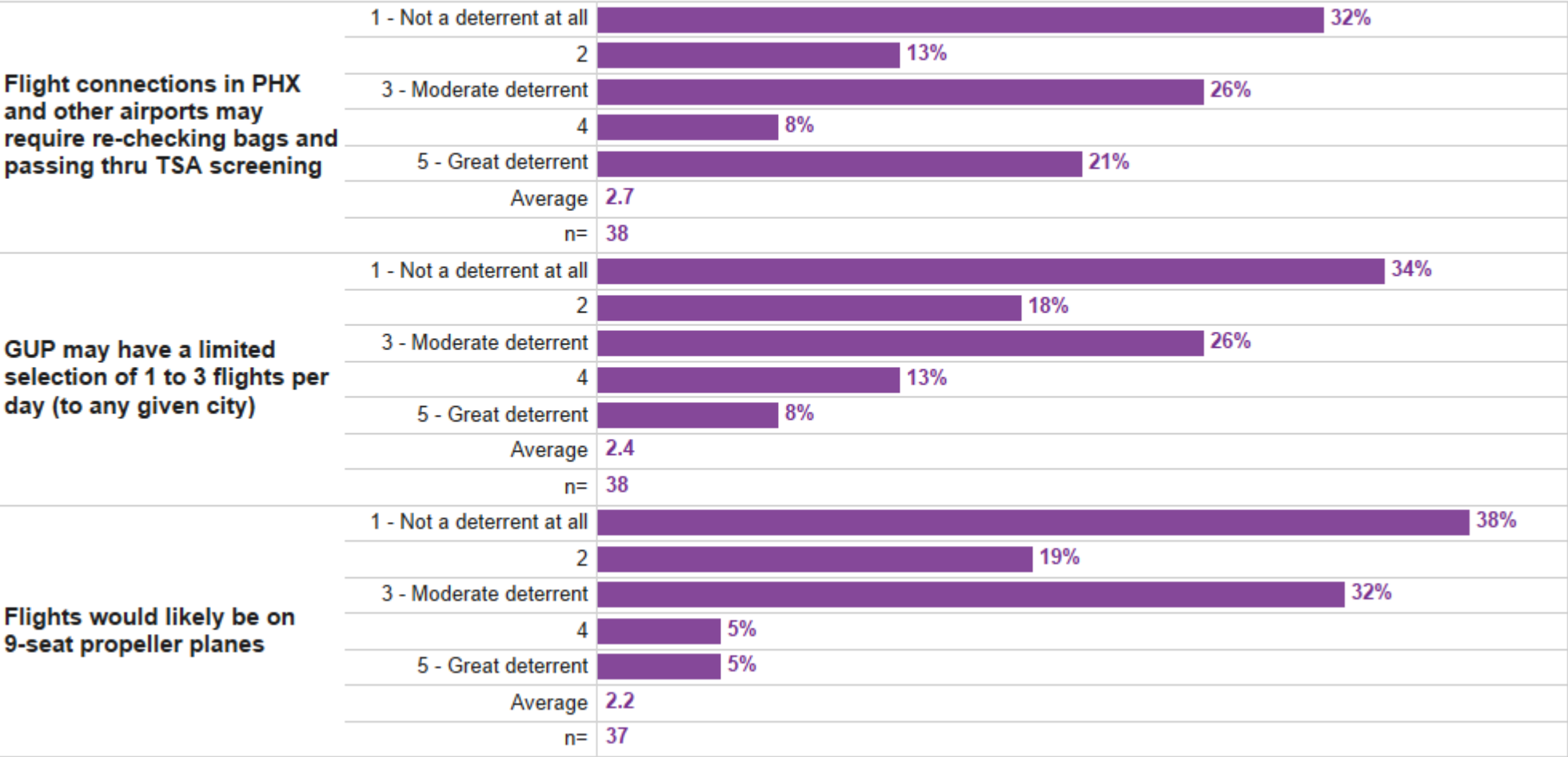
If air service was available, to what extent might the following factors influence your organization to use Gallup Airport on future business trips?



Q7. GUP: Possible Deterrents

- Flight connection hurdles would be a moderate to great deterrent to 55%
- Limited selection of flights would be a moderate to great deterrent to 47%
- Use of 9-seat propeller planes would be a moderate to great deterrent to 43%

To what extent might the following factors deter your organization from using Gallup Airport on future business trips?

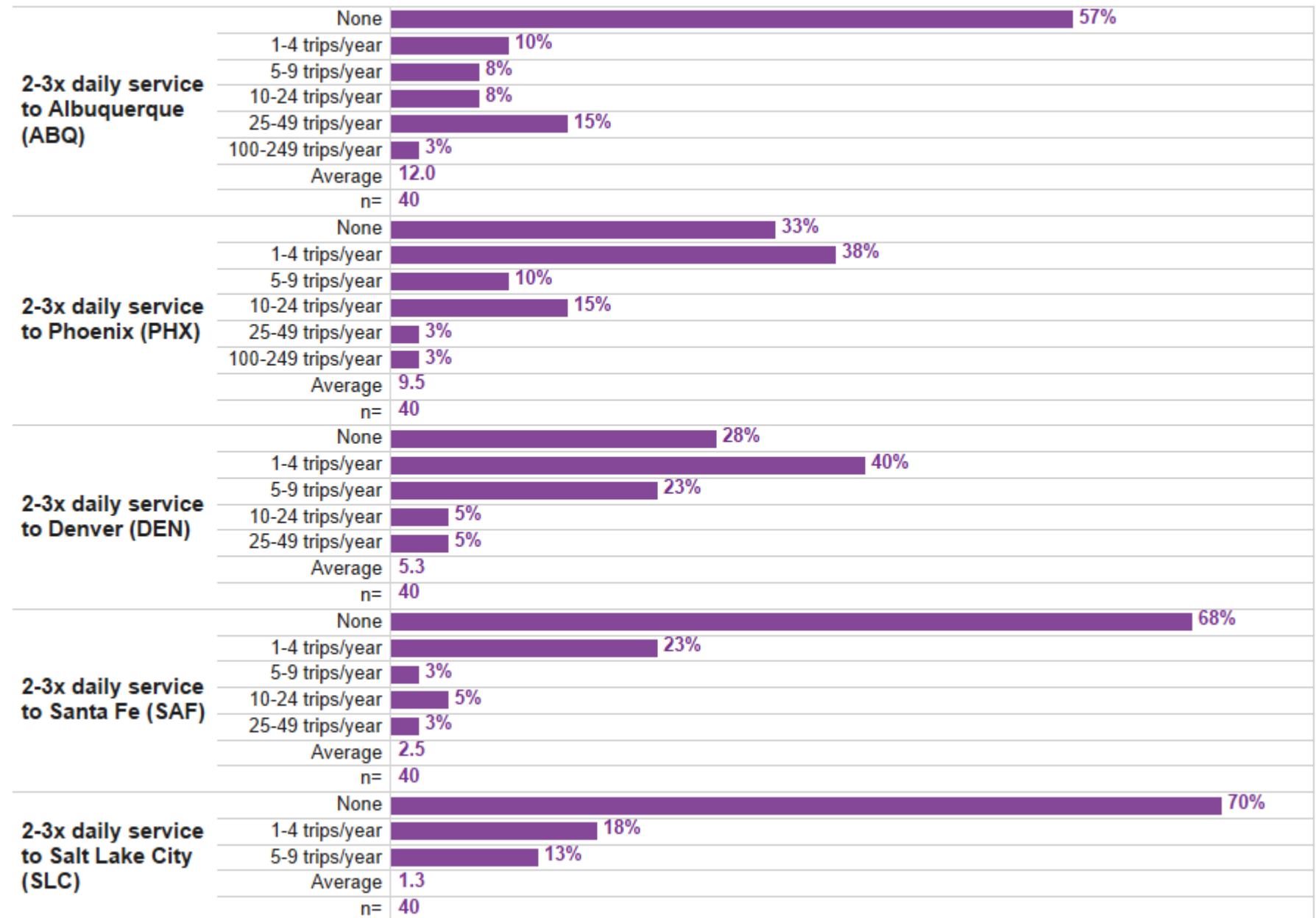


Q8. Use of Potential Flight Routes

Share of employers who would take at least one flight/year to the following airports:

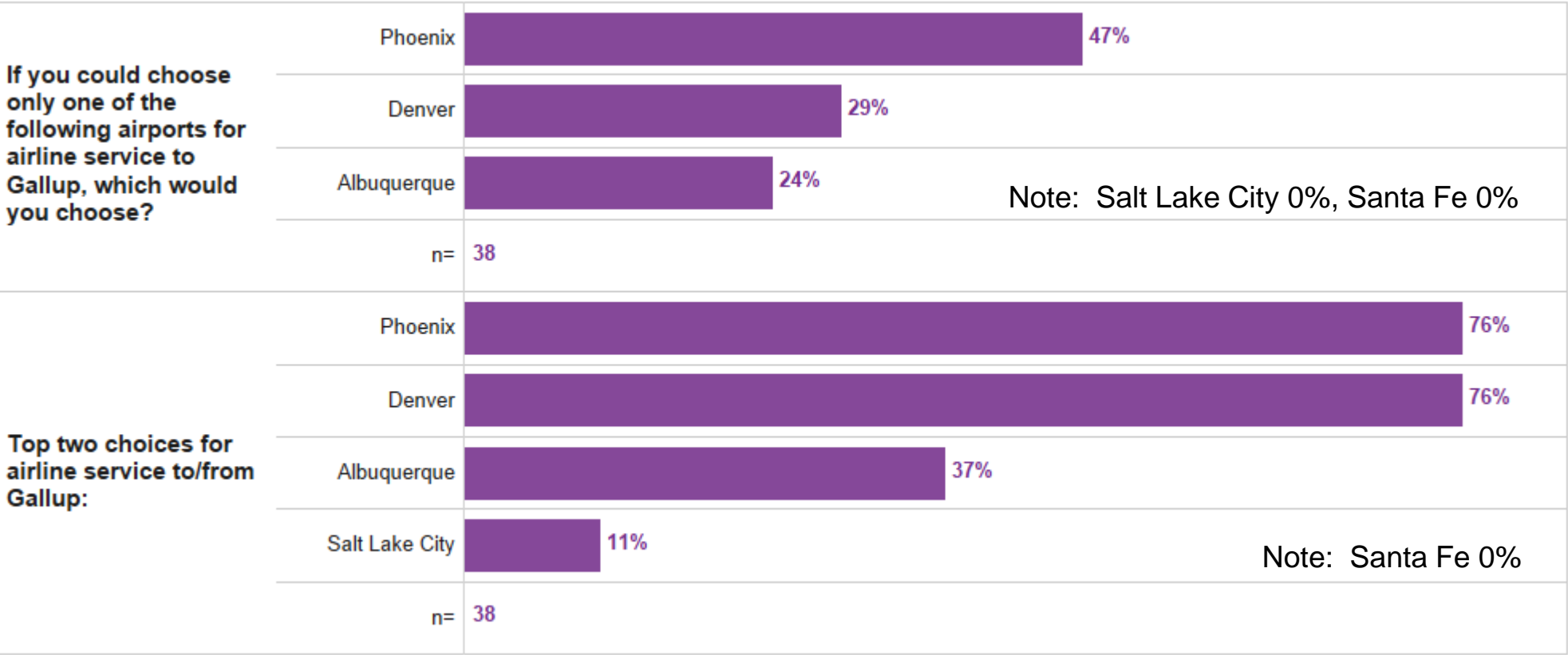
- Denver (72%)
- Phoenix (67%)
- ABQ (43%)
- Santa Fe (32%)
- Salt Lake City (30%)

If commercial air service were available at Gallup Airport, how many “person trips” would your company likely take from Gallup Airport to each of the following airports per year?



Q9 & 10. Top Choice(s) for Direct Flight Service

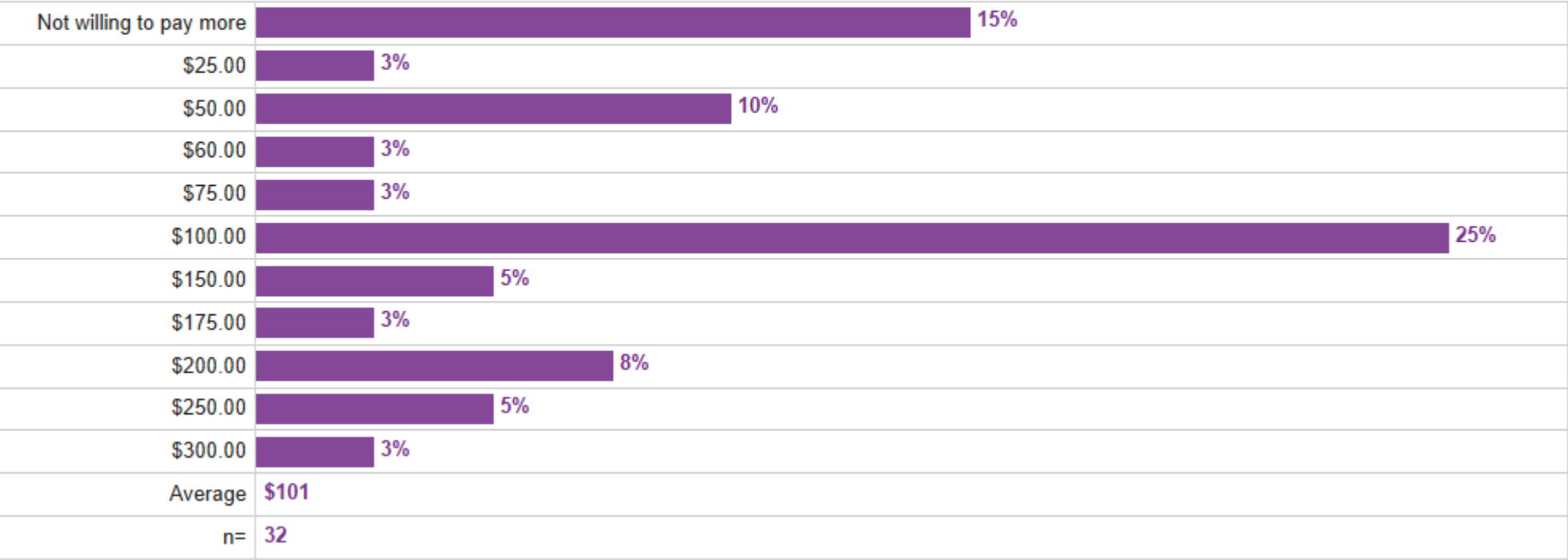
- 47% select PHX as top choice, followed by DEN (29%) and ABQ (24%)
- 76% select each of PHX and DEN as among of their top two choices



Q12. Willingness to Pay More for GUP Service

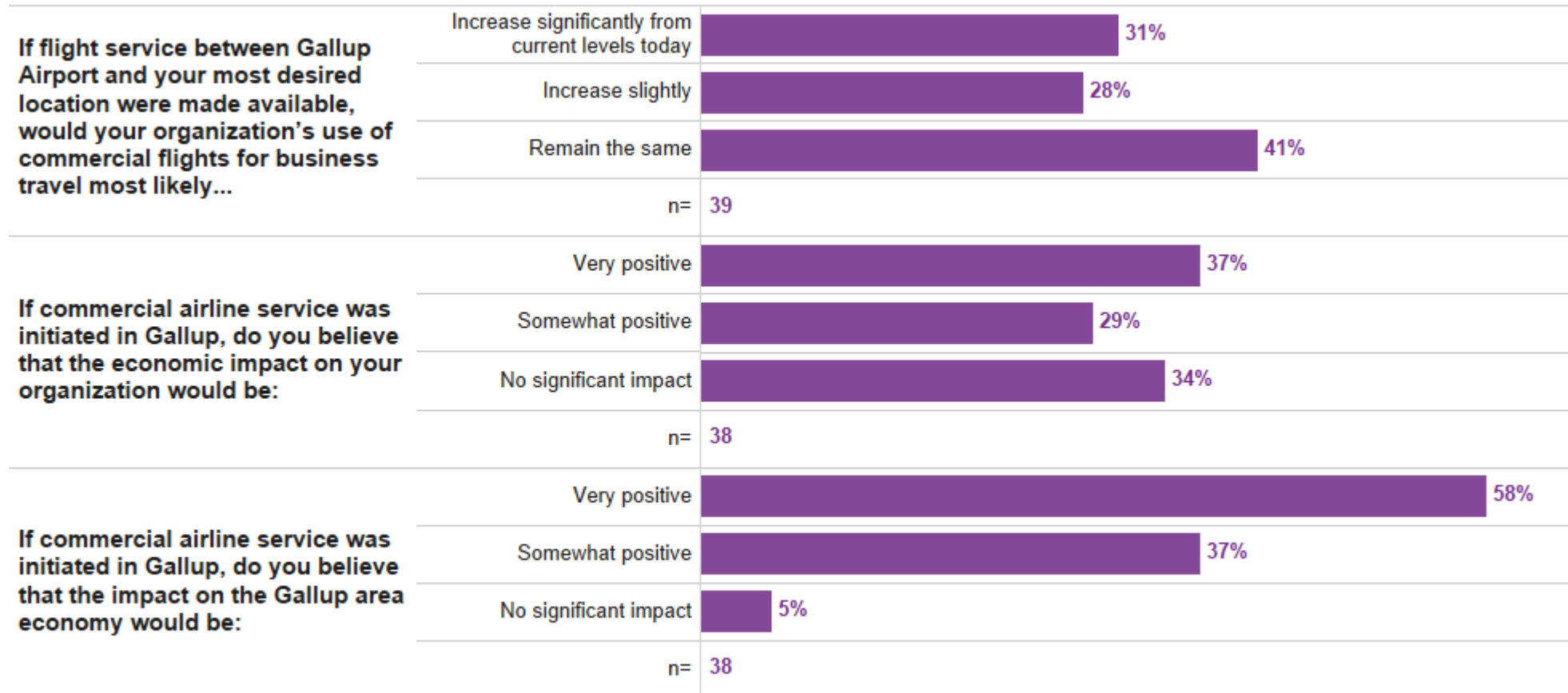
- 85% would be willing to pay more for a flight from GUP than for a flight to same destination from ABQ
- Employers would be willing to spend an average of \$101 more for a round-trip flight from GUP

For a given business trip, how much more (if any) would your organization be willing to pay (round trip, per person) for a flight from Gallup Airport, as compared to a flight to the same city from Albuquerque Sunport (ABQ)?



Q11, 13, 14. Impact of Flight Service to/from GUP

- 59% of employers believe that they would fly more frequently if GUP air service were available
- 66% of employers believe that GUP air service would have a positive economic impact on their organization
- 95% of employers believe that GUP air service would have a positive impact on the Gallup area economy



Q15. Do you have any additional comments or suggestions about the possibility of initiating commercial air service to/from Gallup Airport? Verbatim comments

- I most likely wouldn't use this to fly to Albuquerque or Santa Fe as they're so close and you need a car once there. Flights to bigger hubs more desirable as it would avoid the same flight from Albuquerque to the same hub.

Thank you for your interest in opening up this airport again, seriously lacking in our area, esp when I see areas like Durango/Cortez all having affordable service.

Also, ground transportation to our area needs serious expansion to improve our economy. It's next to impossible to get around if you have no car. There is no bus service b/w Gallup and Farmington; and bus service to Albuquerque is very limited. How can we improve this? Amtrak station is right here, which we take for granted, but also limited service.

Booking an airline flight often takes weeks in advance to get a good rate and a seat. Hopping a bus to Albuquerque or Phoenix or SLC, or a train to LAX (or potentially Dallas) takes hours, if there was reliable service.

Medical transport in our area is also impossible. I have patients that need to get to Albuquerque for specialty appointments and there are companies that provide this, but their insurances do not cover any transport. There are medical transport benefits for VA patients and Tribal members, but nothing for others. One can purchase Medical transport insurance for the emergency airline service, but nothing for ground service.

- Connecting flights to Phoenix and Denver rather than Albuquerque would be more cost effective for the customers, due to Phoenix and Denver being major traffic air hubs. Here at the Window Rock Airport we get constant calls asking if we do commercial flights, to which we respond we only do Navajo Nation official business flights.
- It must be convenient and competitively priced for organizations to take advantage
- It's needed and would get used by many people if not too expensive.
- Lack of Gallup air service hampers industrial and light manufacturing growth
- Let's get this going!
- My only concern is ability to make timely connections both coming and going
- Should ramp up from 4 flight a day to 8 flights a day.
- The flights should be scheduled so that connections at and from ABQ could be made.
- Worthwhile - again, personal travelers might increase more than business travelers

Appendix: Additional GUP Resident Demand Measures

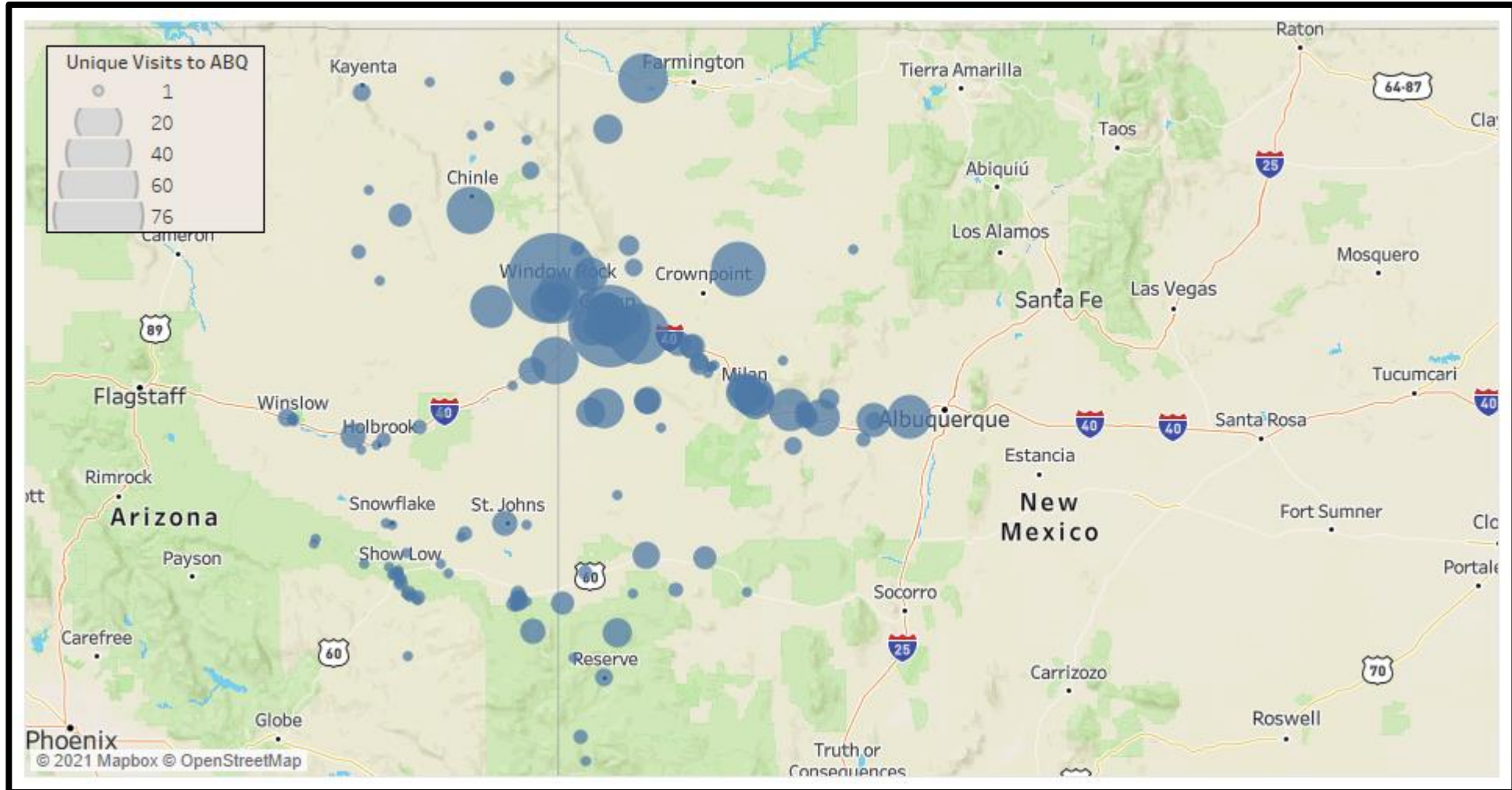
ABQ Catchment Area | Population, Economy & ABQ flights by County

- McKinley County accounts for 2.7 - 3.3% of the ABQ catchment area's jobs, personal income, and GDP, but just 0.9% of ABQ originating enplanements.
- As such, McKinley County **enplanements are under-predicted by economic measures**, which may be a sign of latent demand that might be stimulated if GUP air service were available.
- In the same vein, McKinley County generates about **one-third as many ABQ enplanements** per job and per \$1 million in personal income as the catchment area overall.
- Similarly, Cibola and Apache counties also underperform on enplanement generation (including after adjusting for flights via PHX), suggesting **additional potential demand above and beyond realized demand**.

County, ST	2019 Population (US BEA)	2019 Employment (US BEA)	2019 Personal Income (US BEA)	2019 GDP (US BEA)	2019-21 ABQ Enplanements originating at ABQ
					(Envionics/US DOT O&D/RRC; US destinations only)
Share of ABQ Catchment Area:					
Bernalillo, NM	38.0%	45.0%	39.5%	45.7%	64.1%
Sandoval, NM	8.2%	5.1%	8.3%	4.3%	13.3%
Santa Fe, NM	8.4%	9.8%	11.7%	8.0%	7.1%
Valencia, NM	4.3%	2.4%	3.5%	1.8%	4.4%
San Juan, NM	6.9%	6.3%	5.8%	7.9%	1.6%
Los Alamos, NM	1.1%	2.1%	1.8%	3.0%	1.4%
McKinley, NM	4.0%	3.0%	2.7%	3.3%	0.9%
Rio Arriba, NM	2.2%	1.6%	1.8%	1.9%	0.9%
Taos, NM	1.8%	1.8%	1.6%	1.2%	0.8%
Torrance, NM	0.9%	0.5%	0.7%	0.5%	0.6%
Socorro, NM	0.9%	0.8%	0.7%	0.7%	0.6%
Chaves, NM	3.6%	3.0%	3.3%	2.9%	0.6%
San Miguel, NM	1.5%	1.2%	1.3%	0.8%	0.5%
La Plata, CO	3.2%	4.2%	4.2%	4.4%	0.5%
Cibola, NM	1.5%	1.0%	1.0%	0.8%	0.4%
Lincoln, NM	1.1%	1.1%	1.1%	0.8%	0.3%
Sierra, NM	0.6%	0.5%	0.6%	0.4%	0.3%
Apache, AZ	4.0%	2.9%	3.1%	3.3%	0.3%
Other	7.7%	7.7%	7.3%	8.4%	1.3%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%
McKinley + Cibola + Apache counties	9.5%	6.9%	6.8%	7.4%	1.6%
Absolute values:					
Total ABQ Catchment Area, 2019	1,788,211	963,958	\$77,737,721,000	\$75,043,050,000	1,185,825
McKinley County	71,478	28,855	\$2,062,500,000	\$2,442,637,000	10,865
McKinley + Cibola + Apache counties	170,079	66,625	\$5,269,728,000	\$5,549,754,000	19,047
	ABQ Catchment Area Resident Enplanements per person	ABQ Catchment Area Resident Enplanements per job	ABQ Catchment Area Resident Enplanements per \$1M personal income	ABQ Catchment Area Resident Enplanements per \$1M GDP	
Ratios					
Total ABQ Catchment Area	0.7	1.2	15.3	15.8	
McKinley County	0.2	0.4	5.3	4.4	
McKinley + Cibola + Apache counties	0.1	0.3	3.6	3.4	

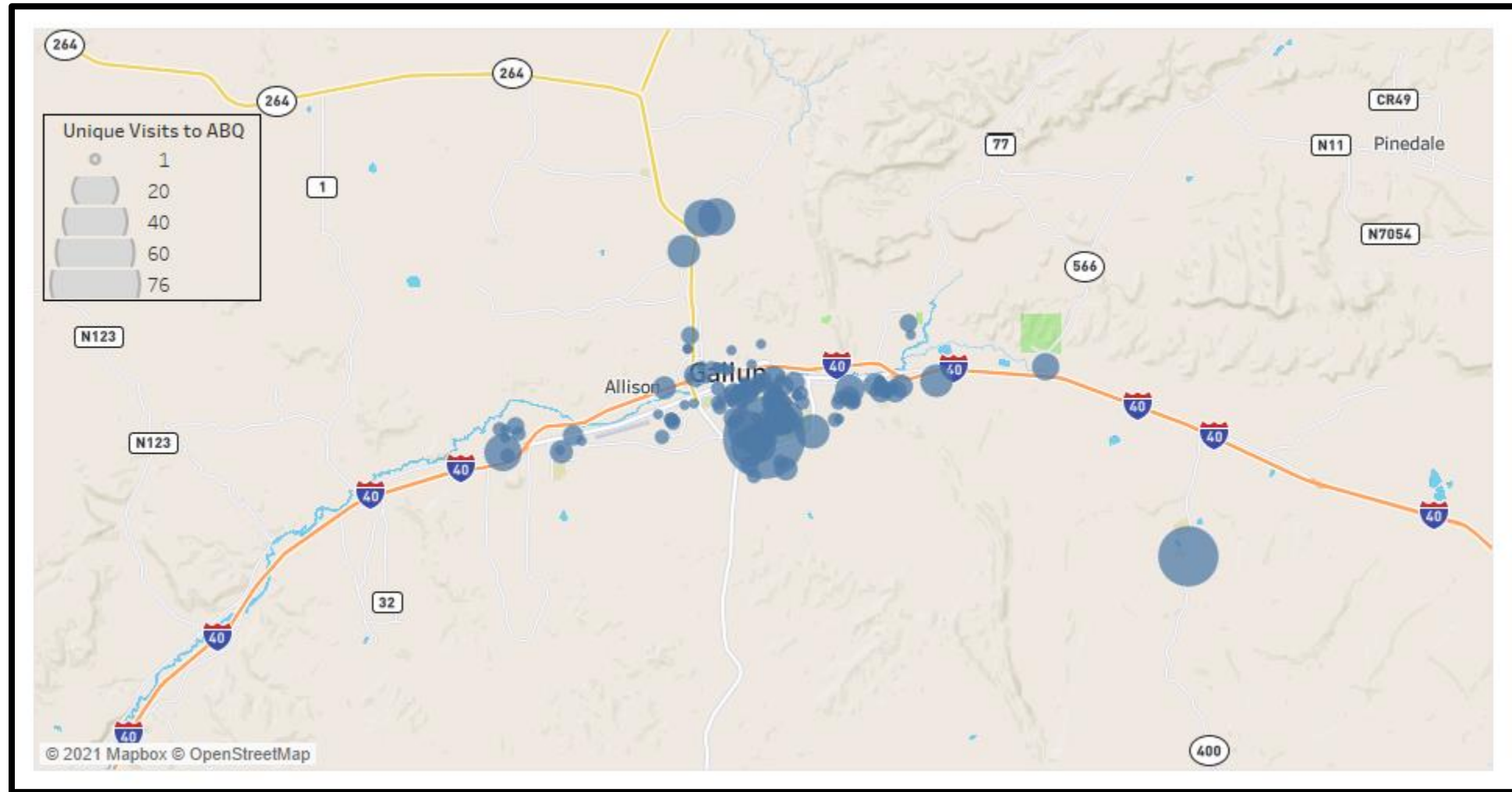
ABQ Passenger Origins | GUP area residents, 2019-21

- Strong concentrations around Gallup, Window Rock, and I-40 corridor



Source: Environics, October 2019 – September 2021; RRC Associates.

ABQ Passenger Origins | City of Gallup zoom, 2019-21



Source: Environics, October 2019 – September 2021; RRC Associates.

Largest GUP Catchment Area Flier Segments at ABQ

Claritas PRIZM Clusters

65 Young & Rustic

17% of GUP Catchment Residents using ABQ



Low Income Middle Age Mostly without Kids

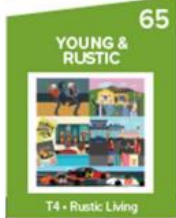
Age <55 Mix Low IPA Below Average Tech

Young & Rustic is composed of restless singles and young families in the nation's rural areas. They enjoy the outdoors by hunting and fishing and also follow rodeo and bull riding, NASCAR, and monster trucks.

Owens a Dodge • Eats at Wendy's • Shops at Shoe Carnival • Follows Monster Jam (monster trucks) • Stays at Best Western • Uses Facebook Games • Listens to Classic Country

[Lifestage Group: Y3- Striving Singles \(Younger Years\)](#)

[Social Group: T4- Rustic Living \(Town & Rural\)](#)



15 New Homesteaders

12% of GUP Catchment Residents using ABQ



Upscale Middle Age Mostly with Kids

Age 35-54 Mostly Owners Elite IPA Above Average Tech

Middle-age, upscale families seeking to escape suburban sprawl find refuge in New Homesteaders, a collection of small rustic townships. With post-graduate education and management positions, these dual-income couples have fashioned comfortable, child-centered lifestyles; their garages are filled with sporting goods and equipment, their houses with the latest technological gadgets which they use for online shopping and following their favorite sports teams.

Owens a Nissan • Eats at Mellow Mushroom • Shops at Finish Line • Follows college sports on Instagram and Twitter • Stays at the Holiday Inn • Watches NCAA Basketball tournament • Listens to Sports Radio

[Lifestage Group: F1- Accumulated Wealth \(Family Life\)](#)

[Social Group: T1- Landed Gentry \(Town & Rural\)](#)



68 Bedrock America

11% of GUP Catchment Residents using ABQ



Low Income Middle Age Mostly without Kids

Age <55 Mostly Renters Low IPA Below Average Tech

Bedrock America consists of economically challenged families in small, isolated towns located throughout the nation's heartland. With modest educations and jobs in the service industry, many of these residents struggle to make ends meet but enjoy reading outdoor magazines and watching talk shows and syndicated shows on TV.

Owens a Chrysler • Eats at Dairy Queen • Shops at Finish Line • Follows pro wrestling • Stays at Motel 6 • Uses Roblox.com for gaming • Listens to Sports Radio

[Lifestage Group: F4- Sustaining Families \(Family Life\)](#)

[Social Group: T4- Rustic Living \(Town & Rural\)](#)



58 Golden Ponds

10% of GUP Catchment Residents using ABQ



Downscale Older without Kids

Age 55+ Mix Below Average IPA Below Average Tech

Golden Ponds is mostly a retirement lifestyle, dominated by downscale singles and couples over 55 years old. Found in small bucolic towns around the country, these high school-educated seniors live in small apartments on less than \$30,000 a year. Daily life is often a succession of sedentary activities such as reading, watching Hallmark movies on TV, playing bingo, and doing craft projects.

Owens a Buick • Eats at Dairy Queen • Shops at Dollar General • Interested in horse racing • Stays at Comfort Inn • Watches NASCAR • Listens to ABC Conservative

[Lifestage Group: M4- Sustaining Seniors \(Mature Years\)](#)

[Social Group: T4- Rustic Living \(Town & Rural\)](#)



Source: Environics, October 2019 – September 2021; Claritas; RRC Associates.

PRIZM assignments assume that residents detected at ABQ resemble the demographic profile of the neighborhoods where they live.

Appendix: Additional GUP Visitor Demand Measures

Estimated Person-Trips by Air Travelers to GUP Catchment Area, 2019

- Rough estimate of approximately 120,000 visitor-trips (330 PDEW) by air travelers to the GUP catchment area.
- Note that these estimates include visitors who are visiting the GUP area as part of a multi-destination trip.

Measure	McKinley Co.	Cibola County	Apache County	Total	Sources
Total overnight visits to broader region (Northwest NM and Northern AZ), 2019 or 2020	1,900,000 overnight visitors in 2019 to Northwest NM (McKinley, Cibola, & San Juan counties)		9,600,000 visits in 2020 to N. AZ (Apache, Coconino and Navajo counties)	n/a	2019 Northwest NM Overnight and Day Visitor Profiles (Longwoods, NM Tourism Department); 2020 AZ Northern Region Overnight Visitor Profile (Longwoods, AZ Office of Tourism)
x Share of regional visits captured by county (assume proportionate to lodging spend)	46%	12%	4.6%	n/a	New Mexico Visitor Spending by County, 2018 (Tourism Economics, NM Department of Tourism); The Economic Impact of Travel in Arizona, 2020p (Dean Runyan Associates / AZ Office of Tourism)
= Number overnight person-trips to county	874,181	224,586	437,566	1,536,333	Note: For additional comparison, the 2020 City of Gallup Market Study estimated 1.077 million overnight person-trips to the City of Gallup in 2018.
x Share of county population in GUP catchment area	97%	13%	76%	79%	US Census ACS 2015-19. Assumes visitor flight demand is proportionate to local population.
= Number overnight person-trips to GUP catchment portion of county	849,056	28,312	333,032	1,210,399	
x Share flying as part of trip	10%	10%	10%	10%	Use 10% for conservatism. Sources: 10%, per 2018 Navajo Nation Visitor and Economic Impact Study, AZ State University, Cluster 3 locations (Window Rock, Chinle, Hubbell Trading Post areas). (Note: could be as high as 27% per share using rental car, which is cited as airport indicator.) 20%, per 2020 AZ Northern Region Overnight Visitor Profile (Longwoods, AZ Office of Tourism).
= Number person-trips by air travelers to GUP catchment area, 2019	84,906	2,831	33,303	121,040	

About half of historic GUP passengers have been inbound visitors

- Passenger itineraries indicate that about 54% of GUP passengers on scheduled commercial flights in 2000-2008 were inbound visitors, and 44% were outbound residents.
- This supports previous modeling projections that visitor flight demand would be roughly similar to resident flight demand.

Route	Date	One-Way Passengers	% Point of Origin: Originating	% Point of Origin: Destination	% Point of Origin: Other
GUP-FMN-DEN	2007-2008	722	44.7%	46.8%	8.5%
GUP-PHX	2007-2008	292	47.5%	52.5%	0.0%
GUP-SOW-PHX	2007	362	50.0%	50.0%	0.0%
GUP-ABQ	2000-2002	3,123	43.4%	56.6%	0.0%
TOTAL		4,500	44.4%	54.2%	1.4%

Source: US DOT origin/destination data; Diio Mi; RRC Associates.

Gallup Tourism

- Diverse tourism attractions and events.
- 17% of travelers thru Gallup stay overnight.



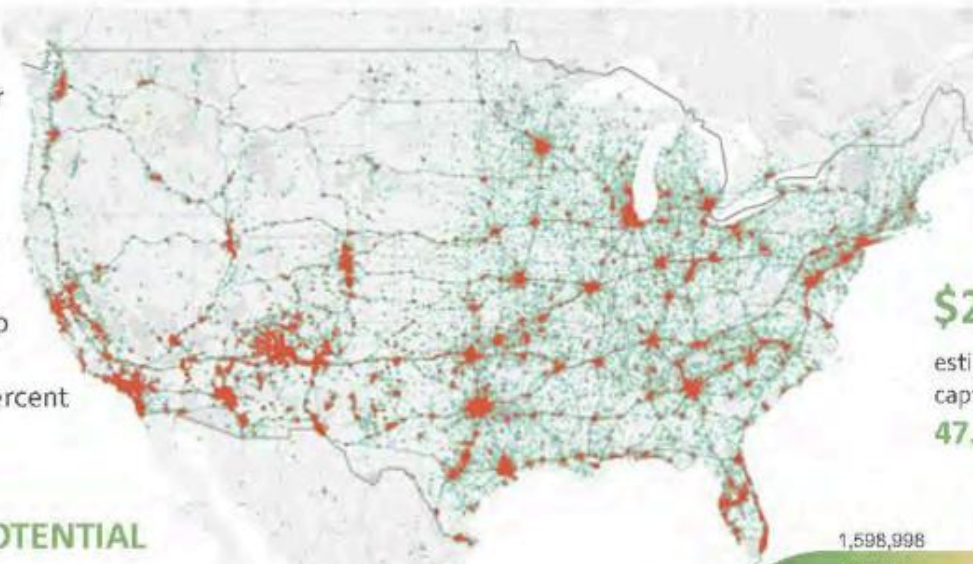
Source: 2020 Gallup Market Study Final Report | Place Dynamics.

Gallup Visitation

- 6 million total visitor-trips to Gallup originating from 100+ miles away.
- About 1.1 million overnight visitor-trips to Gallup.
- Diverse geographic origins.

Untapped visitor potential

Traffic passing through Gallup originates in all parts of the U.S. and other countries. Over 6 million people pass through the city each year, with more than 7 million total visitor days. Visitors spend \$602.14 million, but Gallup businesses only capture \$286.28 million, or 47.5 percent of the potential market.

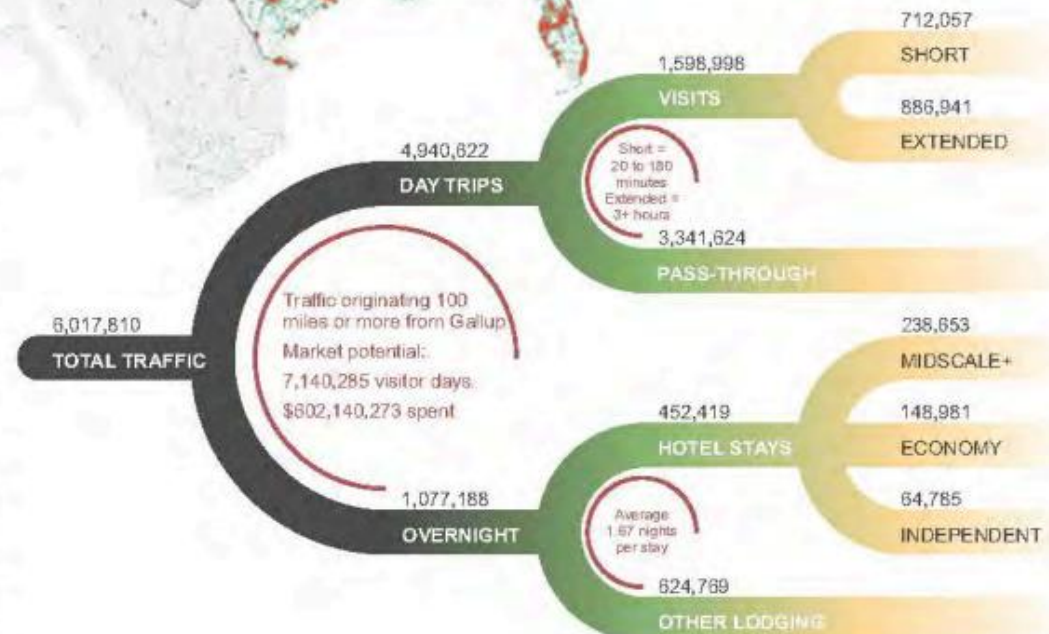


average spent
\$84.33
per visitor day

\$286,280,981
estimated visitor market
captured in Gallup -
47.5% market share

VISITOR MARKET POTENTIAL

Total visitor market	\$602,140,273
Lodging	\$198,104,149
Eating and drinking	\$156,556,471
Food stores	\$31,913,434
Gas	\$56,601,186
All other retail	\$78,278,235
Motor vehicle/parts	\$7,398,794
Furniture/electronics	\$8,020,005
Building materials/garden	\$10,042,460
Health/personal care	\$9,866,080
Clothing/accessories	\$4,335,204
Sporting goods/hobbies	\$4,153,107
Department stores	\$26,972,946
Miscellaneous stores	\$7,489,638



Source: 2020 Gallup Market Study Final Report | Place Dynamics.

Gallup Lodging

- 39 hotels with 2,458 rooms (Nov. 2019)
- 62.6% occupancy rate (2018)
- 19% growth in room night demand over five years (2013-18)

Opportunity in the lodging sector



Gallups' strong visitor traffic and highway location support strong demand for overnight stays. The number of room nights captured in the city has grown as new hotels opened, improving the selection and quality of rooms available to visitors.

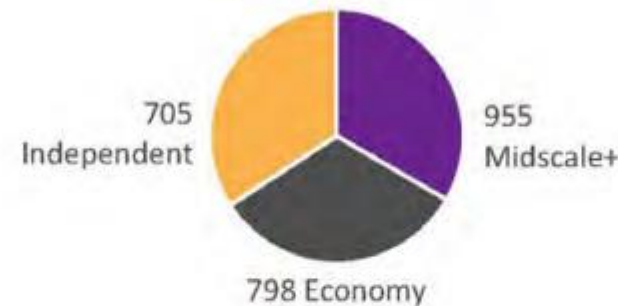
Along with the city's hotels, 22 actively listed short-term rentals (AirBNB or VRBO) have a 62 percent occupancy rate at an average of \$71 per night.

OCCUPANCY



19% growth in demand over five years

39 HOTELS 2,458 ROOMS



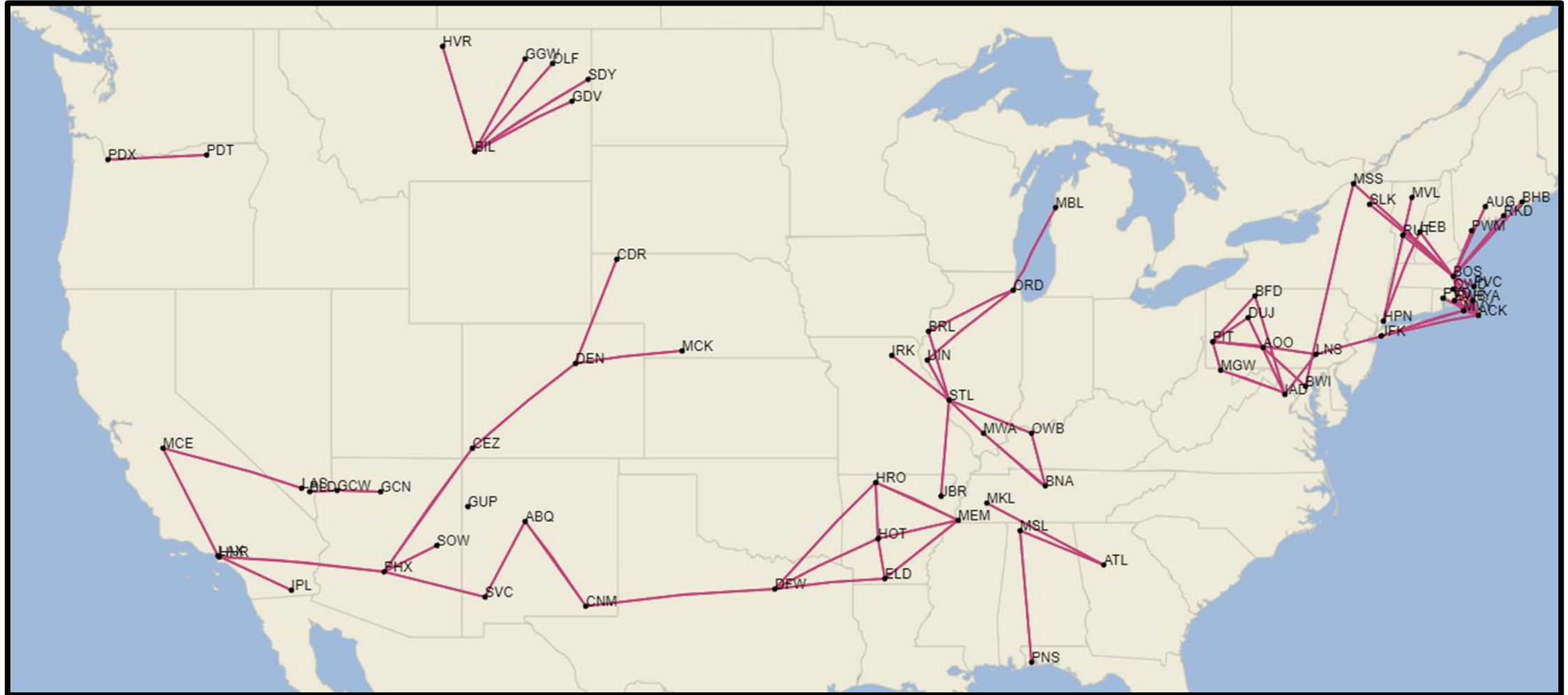
\$76.25 ADR - All Gallup hotels
\$87.63 ADR - Gallup midscale+ hotels



Hilton Garden Inn (2014)
 Best Western Plus Inn & Suites (2015)
 Comfort Inn (1999)
 Comfort Suites (2009)
 Fairfield Inn & Suites (2015)
 Hampton Inn (2005)
 Hampton Inn West (2005)
 Holiday Inn Express & Suites (2012)
 La Quinta Inn & Suites (2005)
 Springhill Suites (2016)
 TownePlace Suites (2017)
 Quality Inn & Suites (1996)
 Sleep Inn (1995)
 America's Best Value Inn (2005)
 Days Inn East (1975)
 Days Inn & Suites Red Rock (1990)
 Econo Lodge (1988)
 Howard Johnson (1966)
 Knights Inn East (1965)
 Knights Inn West (1993)
 Microtel Inn & Suites (1997)
 Motel 6 (1975)
 Red Roof Inn (1988)
 Super 8 (1988)
 Travelodge (1997)

Appendix: US Flight Routes Served by 1-9 Seat Planes

Scheduled Routes Served by 1-9 Seat Planes, Jan. 2022

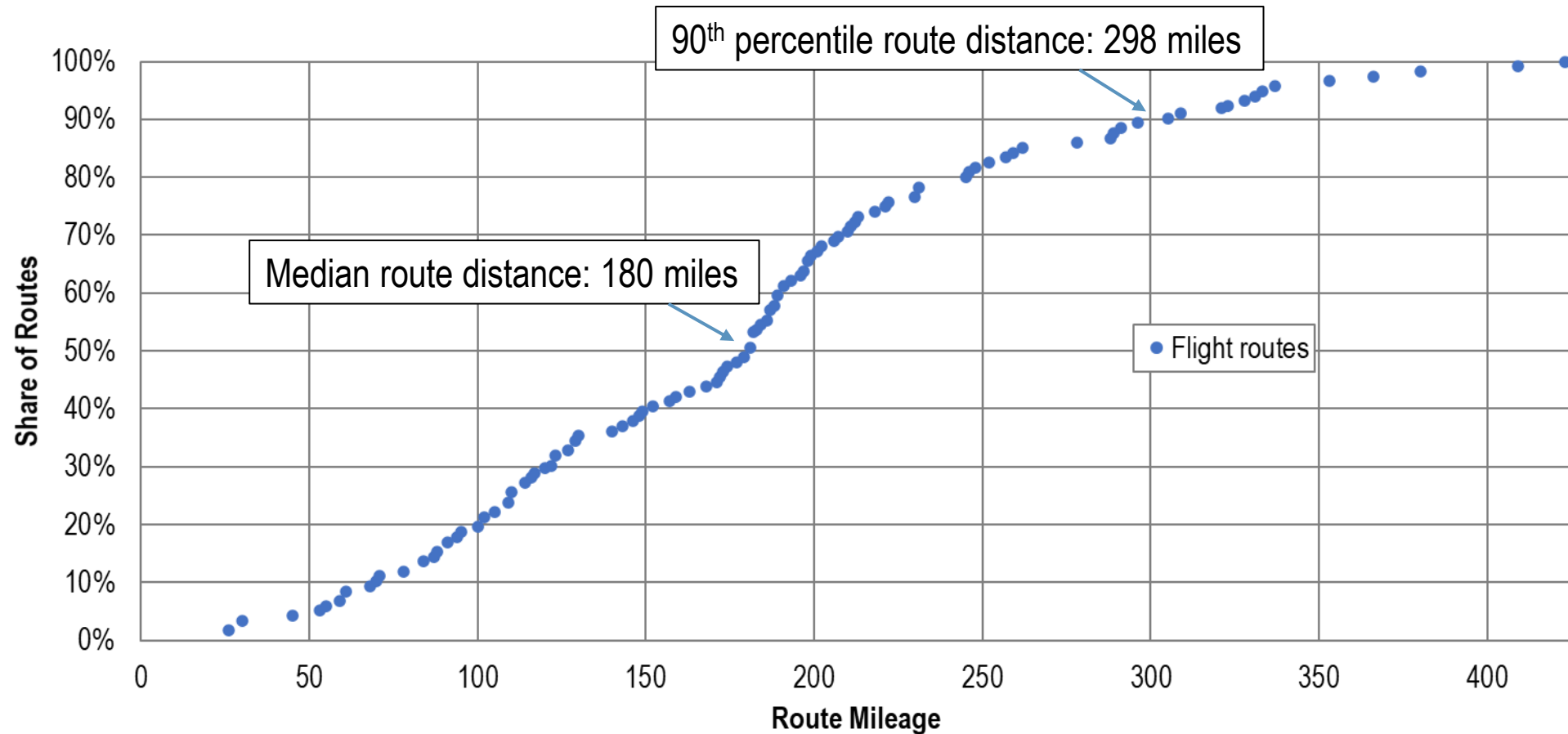


Source: *Diio Mi*.

Mileage of Flight Routes Served by 1-9 Seat Planes

Continental US | February 2021 – January 2022

95% of routes are 333 miles or less, an indication that 1-9 seat planes are primarily used to serve shorter routes



Source: Diio Mi.

Airlines Flying Routes Served by 1-9 Seat Planes

Continental US | February 2021 – January 2022

9 airlines operated scheduled routes using 1-9 seat planes in the past 12 months

Airline Code	Airline
AN	Advanced Air, LLC
4B	Boutique Air Inc.
9K	Cape Air
YR	Grand Canyon Airlines Inc
YB	Harbour Air Ltd
3E	Multi-Aero Inc. dba Air Choice One
9X	Southern Airways Express
TJ	Tradewind Aviation LLC
4P	Viking Airlines AB

Source: Diio Mi.

Aircraft With 1-9 Seats Used to Fly Routes Continental US | February 2021 – January 2022

5 manufacturers had 1-9 seat planes in service on scheduled routes

Manufacturer	Aircraft Type
Beechcraft	BET
Cessna	Cessna
Pilatus	PC-12
Piper	Piper
Tecnam	Tecnam P2012 Traveler

Source: *Dijo Mi*.



GUP Air Service Market Evaluation January 17, 2022

THANK YOU



RRC
A S S O C I A T E S



RRC Associates
4770 Baseline Road, Suite 355
Boulder, CO 80303
rrcassociates.com
303-449-6558

